

ISSN 1911-2017 (Print)
ISSN 1911-2025 (Online)

ASIAN SOCIAL SCIENCE

Vol. 13, No. 4 April 2017



CANADIAN CENTER OF SCIENCE AND EDUCATION

Editorial Board

Editor-in-Chief

I-Tsun Chiang, National Changhua University of Education, Taiwan

Associate Editors

Alexander S Takeuchi, University of North Alabama, United States

Nicholas Ruei-lin Lee, Chaoyang University of Technology, Taiwan

Polly Yeung, Massey University, Palmerston North, New Zealand

Editorial Assistant

Jenny Zhang, Canadian Center of Science and Education, Canada

Reviewers

Abu Bakar Abdul Hamid	Ivy Haoyin Hsieh	Ötügen Senger
Akhyar Rido	Jake M. Laguardor	Ozgun Demirtas
Alireza Salehi Nejad	Jashpal Kaur Bhatt	Pablo Zanol
Ana Castro Zubizarreta	Jiann-wien Hsu	Päivi Rasi
Andrew Schumann	Jin Su Jeong	Paul Allin
Anna H. Jankowiak	Kannan Subramaniam	Pavla Chejnová
Apostolos Zaridis	Kate Ksobiech	Pescaru Maria
Arash Riasi	Kimburley Choi	Ping Sophie Sun
Arielle S. Selya	Krishna Chandra Mishra	Pourya Pourhejazy
Arshad Javed Rizvi	Kristina Johansson	Priyadarshini Sen
Attama Nilnoppakun	Kwang Ho Lee	R. K. Kavitha
Bharat Bhushan Verma	Lamartine Braga	Rakhyun Edward Kim
Boaventura DaCosta	Lance Y. Hunter	Rickey Ray
Carolyn Walker	Linda Wolf	Roselina Ahmad Saufi
Chang-Hee Kim	Ma. Mercedes T. Rodrigo	Saiyidi Mat Roni
Cher Weixia Chen	Marcelo Afonso Ribeiro	Sang-Bing Tsai
Chi Hong Nguyen	Marja-Leena Rönkkö	Selda Atik
Chia-Hung Lai	Martina Blaskova	Shaharuddin Md. Salleh
Choi Sang Long	Mauro Giuffrè	Sharifah Munirah Alatas
Chung-Jen Wang	Mohamed Ajouaou	Shiwei Jiang
Chung-Khain Wye	Mohammad Abdollahi-Guilani	Shruti Tewari
Colin Wark	Mohammad J. Maghsoodi Tilaki	Siti Marziah Zakaria
Ehsan Rostamzadeh	Mohammadreza Davari	Sofia Asonitou
Elyase Iskender	Mohd Azmir Mohd Nizah	Stephen Healy
Emilia Florina Grosu	Müge Yukay Yüksel	Syakir Amir Ab. Rahman
Emine Özmete	Muhammad Saeed	Tim Tarver
Fatemeh Ahadi	Muhammed Haron	Tsui-Yii Shih
Gianluca Lax	Nadia Helmy El Shafey	Tsung-Hsien Tsai
Gianvito D'Aprile	Nawaraj Chaulagain	U-maporn Kardkarnklai
Görsev Sönmez	Nikos Amanatidis	Uqbah Iqbal
Gulay Gunay	Nipapan Jensantikul	Won-jun Lee
Haixia Wang	Nor Erne Nazira Bazin Bazin	Worarak Sucher
Honghong Xu	Nur Barizah Abu Bakar	Xingan Li
Hyung Seok Lee	Oliver Holtmoeller	Yung-Jaan Lee
Isidore Ekpe	Ong Puay Liu	Zribi El Ghak Teheni
Ismail Meric	Ornella Ricci	

Contents

Designing First-year Sociology Curricula and Practice	1
<i>Theida Ann Thomas, Sue Rechter, Joy Wallace, Pamela Allen, Jennifer Clark, Bronwyn Cole, Lynette Sheridan Burns, Adrian Jones, Jill Lawrence</i>	
Effects of Chinese Sport Tourists' Perceptions toward Service Quality in Jeju Island	14
<i>Shiheng Zeng, Sung-Bum Chun, Weisheng Chiu, Chanmin Park, Chul Won Lee</i>	
Effect of Prevalent Supervisory Styles on Teaching Performance in Kuwaiti High Schools	25
<i>Sultan G. Aldaihani</i>	
Aircraft Acquisition Conceptual Framework	37
<i>Ismail bin Yusof, Abd Rahman Abdul Rahim</i>	
Information Resources Co-construction and Sharing of Higher Education	65
<i>Juan Tian</i>	
Skills and Knowledge Competency of Technical and Vocational Education and Training Graduate	69
<i>Che Rus Ridzwan, S. Malik, Zaliza Hanapi, Suriani Mohamed, Mohd Azlan Hussain, Shafeeqa Shahrudin</i>	
The Importance of Multicultural Education in Schools in the Era of ASEAN Economic Community	78
<i>Imron Arifin, Agustinus Hermino</i>	
"Civilization and Its Discontents"—A Reappraisal	93
<i>Siegfried Zepf</i>	
Power, Legitimacy, and Urgency of Community-Based Tourism Stakeholders in Northeastern Thailand	104
<i>Mattara Sripun, Sekson Yongvanit, Richard Pratt</i>	
Relationship between Leisure Facilitators and Serious Leisure among Female Korean College Soccer Participants	117
<i>Hee Yeob Kang, Hyung Hoon Kim, Hyun Wook Choi, Won Il Lee, Chul Won Lee</i>	
A Study on the Cultivation of Female Students Ability in the Girl's Athletic Association-Taking Qingdao University of Science and Technology as an Example	125
<i>Xiaodong Chu, Xiaowen Liu</i>	
Evidence-Based Research on Barriers and Physical Limitations in Hospital Public Zones Regarding the Universal Design Approach	133
<i>Charanya Phaholthep, Antika Sawadsri, Thirawut Bunyasakseri</i>	
Business Coevolution: Considerations from the Mobile Telecommunication Sector in Latin America Economy	147
<i>Hugo-Alberto Rivera-Rodríguez, Sergio-Andrés Pulgarín</i>	
Financial Incentives for Adopting Cloud Computing in Higher Educational Institutions	162
<i>Ali Al-Badi, Ali Tarhini, Wafaa Al-Kaaf</i>	
Solving Society's Big Ills, A Small Step	175
<i>Ravi Kashyap</i>	
The ASEAN Free Trade Agreement and Vietnam's Trade Efficiency	192
<i>Hai Thi Hong Nguyen, Thang Ngoc Doan</i>	
Leveraging Social Media for Development in Organisations	201
<i>Ajith Sundaram</i>	
Reviewer Acknowledgements for Asian Social Science, Vol. 13, No. 4	221
<i>Jenny Zhang</i>	

Designing First-year Sociology Curricula and Practice

Theda Thomas¹, Sue Rechter¹, Joy Wallace², Pamela Allen³, Jennifer Clark⁴, Bronwyn Cole⁵, Lynette Sheridan Burns⁶, Adrian Jones⁷ & Jill Lawrence⁸

¹ School of Arts, Australian Catholic University, Melbourne, Australia

² Faculty of Arts, Charles Sturt University, Bathurst, Australia

³ Faculty of Arts, University of Tasmania, Hobart, Australia

⁴ School of Humanities, University of Adelaide, Australia

⁵ Pro Vice-Chancellor (Education), Western Sydney University, Sydney, Australia

⁶ School of Humanities and Communication Arts, Western Sydney University, Sydney, Australia

⁷ Department of History and Archaeology, Latrobe University, Melbourne, Australia

⁸ School of Arts and Communication, University of Southern Queensland, Toowoomba, Australia

Correspondence: Theda Thomas, School of Arts, 115 Victoria Parade, Fitzroy, 3065, Australia. E-mail: theda.thomas@acu.edu.au

Received: January 17, 2017

Accepted: February 3, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p1

URL: <https://doi.org/10.5539/ass.v13n4p1>

Abstract

Many countries are now specifying standards for graduates in different disciplines, including sociology. In Australia, the Australian Sociological Association (TASA) has developed Threshold Learning Outcomes (TLOs) for sociology to provide the learning outcomes that students graduating with a bachelor's degree in sociology should achieve. These TLOs have encouraged universities to think explicitly about their sociology curriculum in a holistic way. This paper reports on a project that investigated the skills and concepts sociology students need to learn in first year to meet the TLOs by the time they graduate. The project identified the needs of students as they transition from school or work into the study of sociology in first year through a study of literature of first-year pedagogy and a student survey. A workshop was held for sociology that involved 37 academics from 14 universities. The workshop was used to promote a rethink of teaching of sociology in the light of the new TLOs as well as to collect ideas from the participants. The student surveys, workshop ideas and relevant literature were analyzed and synthesized for each TLO to determine what skills and concepts first-year students needed to learn, identify what they might find difficult and propose strategies for teaching. The paper also provides practical ideas for engaging academics with thinking holistically about the sociology curriculum and for teaching and learning sociology in the first year of an undergraduate degree.

Keywords: discipline standards, first-year pedagogy, learning outcomes, sociology, threshold concepts

1. Introduction

A sociology major in a liberal arts or social science degree is usually made up of an "Introduction to Sociology" subject followed by a wide selection of more advanced sociology subjects each covering a different topic. The introductory sociology subject is often used as a service course to other programs or as an elective (Greenwood, 2013). In their first year, students are introduced to the discipline of sociology and what sociologists do, but sociology is a diverse discipline and there is little consensus on what should be taught (Greenwood, 2013; Marshall, 2009). The traditional way of instructing students in an introductory sociology subject is to cover a wide range of topics using passive learning methods (Fujieda, 2009). The introductory sociology textbook will address this range of topics, with multiple concepts for each topic providing an overview of the field. The advanced sociology subjects will then provide greater depth in each of the topics. This method of curriculum development has been criticised as it may prevent students from engaging with sociology in an in-depth fashion from first year (Fujieda, 2009).

In 2012 The Australian Sociological Association (TASA) sponsored a working group that consulted widely with academics, employers and practitioners to establish a set of minimum standards for Sociology graduates. These

standards were called Threshold Learning Outcomes (TLOs). The agreement on TLOs, while essential, is only the first step, and needs to be supported by whole of program design that scaffolds student learning in a progressive fashion from first year to graduation.

This paper reports on a project undertaken to discover how this complex matter of curriculum design might be undertaken for first-year sociology, as a foundation for a sequenced curriculum that would then unfold in second and third years. The project focused on five key disciplines in the humanities and social sciences, namely: History, Politics, Geography, English and Sociology.

The main research questions posed for sociology were:

- i. What skills and concepts do students in sociology need to learn in first year to meet the TLOs by the time they graduate with a major in sociology?
- ii. What barriers might there be to first-year sociology students learning those skills and concepts?
- iii. What strategies can we use to help first-year sociology students learn the skills and concepts?

This paper provides the context for the study by describing standards and guidelines for designing sociology curricula, paying attention to the threshold learning outcomes (TLOs) for sociology developed in Australia and used in this investigation. The study then addresses the requirements for a first-year sociology curriculum in ensuring that students transition smoothly into their studies at university and become learners and thinkers within the sociology discipline. The methodology used for the study is explained with a focus on the techniques that were used in workshops. The paper then proposes ideas for each TLO for first-year sociology based on the analysis of the literature, the workshops and student surveys. These ideas can be applied to a wide variety of content within the field of sociology.

2. Background Literature

2.1 The Australian Context: Standards for Graduates in Sociology

The Australian Tertiary Education Quality and Standards Authority (TEQSA) requires that universities externally benchmark and quality assure their disciplines (TEQSA, 2013). In order to meet this requirement, the Australian Learning and Teaching Council (ALTC) facilitated the development of standards for disciplines in the period 2010-2011 through a project called 'Learning and Teaching Academic Standards (LTAS) Project'. The aim of the project was to develop standards for graduates from different disciplines. These standards were called Threshold Learning Outcomes (TLOs) and were defined as '*the minimum learning outcomes in terms of discipline specific knowledge, discipline specific skills including generic skills as applied in the discipline, and discipline specific capabilities that a graduate of any given discipline must have achieved*' (ALTC, 2011, p.13). The project teams consulted with academics, practitioners and employers to develop TLOs across a wide spectrum of discipline areas including Law, Accounting, History, Geography, Sciences and Creative Arts. While agreement about this approach to curriculum development and education is not universal, TLOs and other discipline standards offer a flexible framework for what has been identified as the need for sociology academics to explicitly and reflexively consider curriculum issues in sociology (Marshall, 2009).

The ALTC tasked peak discipline groups with developing TLOs for their discipline and TASA took on this responsibility for sociology in Australia (Farquharson, 2013; TASA, 2012). The TASA Executive formed a National Academic Standards Working Group under the leadership of Associate Professor Karen Farquharson. The working group consulted widely across the university sector and the final TLOs were published in 2012. They are presented in Figure 1 (Farquharson, 2013; TASA, 2012). These learning outcomes are not meant to be prescriptive in terms of content, teaching methods or assessment methods. They allow institutions the freedom to adapt them according to their mission and strategic vision (Farquharson, 2013) and they allow teachers to adapt them according to their own teaching styles and the needs of their classes.

Other countries have also defined standards for sociology or provide guidelines for offering sociology majors. For example, The United Kingdom Quality Assurance Agency (QAA) has created discipline benchmark statements for sociology that include standards for general cognitive skills and abilities; discipline-specific skills and abilities and transferable skills (QAA, 2007). They also include a typical standard and a threshold (or minimum) standard, which are similar to the standards used in Australia. The Tuning Project in Europe has defined agreed competences and learning outcomes for various disciplines (Tuning, n.d.) but, at this time (August 2016), they have not addressed the discipline of sociology. In the United States, the American Sociological Association (ASA) report, 'Liberal Learning and the Sociology Major', (released in 1991 and updated in 2004) offers guidance for designing and evaluating undergraduate sociology curricula that provide students with the depth required for a sociology major (McKinney, Howery, Strand, Kain & Berheide, 2004).



Figure 1. TLOs for Sociology (TASA, 2012, p. 6)

While the terminology might be different in different countries, there is a shared understanding that the sociology major must have sufficient depth and range to allow the cumulative development of students' learning as they move from first year to graduation. This paper focuses on the TLOs for sociology as defined in Australia and the skills and concepts students need to learn at first year to facilitate their thinking and learning so they meet the TLOs by the time they graduate.

2.2 *First-year Learning and Learners in Sociology*

When designing a first-year curriculum, academics need to consider what first-year students should learn so that they can meet the TLOs by the time they graduate; the needs of a first-year student as they transition into university; and the requirement to introduce students to ways of thinking and learning in the discipline of sociology. Bovill, Bully and Morss (2011) suggest that designers of first year curricula for sociology should consider where students are starting from, where they are going, and what the intended outcomes are for the first year. Greenwood (2013) propose that sociology teachers should ask six questions about their students before they design their courses: who their students are; what characteristics they might have that would enhance or be a barrier to their learning; why their students are choosing sociology and what they want to learn; what students aspire to academically or career wise and how their students could use what they are being taught in their lives.

Kift, Nelson and Clarke (2010) suggest a whole-of-university approach to transition pedagogy and see curriculum as comprising the entire academic, social and support system that makes up the student experience. This paper, however, focuses on the part that first-year sociology subject/s can play in transitioning students into university and becoming effective learners of sociology.

According to Tinto (2012), first-year curriculum design and classroom practice should help students to develop a sense of belonging both within the university and as learners in their discipline. A variety of authors have recognised the importance of collaborative learning experiences, active engagement and assessment in motivating first year students and enhancing their social and academic experience of the first year at university (Bovill et al., 2011; Nicol, 2009; Tinto, 2012). But engagement is not enough according to Nicol (2009); students also need to be empowered to become independent learners, critical thinkers and effective learners within the discipline community. The sociology curriculum should include sequential learning experiences that allow students to develop their ability to study in depth and become 'increasingly independent and knowledgeable members of the community of discourse in sociology.' (Berheide, 2005, p.4). Kift (2009) proposes that these experiences should start in first year by giving detailed guidance to students to facilitate their learning and being explicit about the teaching of skills and methodologies, then gradually removing that scaffolding and challenging students to meet their potential and empower them as learners within the discipline (Nicol, 2009).

Bovill et al. (2011) suggest that it is important to consider each student's background and aspirations and what we want them to achieve by the end of first year. This is particularly relevant in a discipline like sociology according to Fujeida (2009) as its focus on social structures like class, race and gender and how they shape

human behaviour, will personalise many of the issues for students.

2.3 Threshold Concepts and Signature Pedagogies in Sociology

The TLOs are intended to encapsulate the key concepts and skills that sociology students should master by the time they graduate. The goal of the project described in this paper was to ‘unpack’ these TLOs for the purposes of developing curricula that foster the development of the TLOs cumulatively across the three-year major. Meyer and Land (2003) use the term ‘threshold concepts’ to describe the concepts that are key to understanding a particular discipline or theory. They see these as transformative, integrative and troublesome. They are transformative in that once a student grasps the key concept they are then able to think in the discipline context in a more mature way, leading to a change in the students’ personal or professional identity (Land & Meyer, 2006). They are integrative in that they can change how students view other disciplines or how they integrate their learnings with their existing knowledge. They are troublesome in that they are often challenging and can sometimes be difficult to grasp initially.

So, what are these threshold concepts (for the purpose of this discussion ‘concepts and skills’ is more appropriate) for sociology and how should we teach them? In a 2007 survey of American discipline and teaching leaders and a comprehensive survey of then-current relevant literature, Persell, Pfeiffer and Syed (2007) identified nine key areas when considering the question ‘what should students understand after taking Introduction to Sociology?’ These areas were:

- i. thinking sociologically (using the sociological imagination);
- ii. understanding the scientific nature of sociology;
- iii. being able to apply complex and critical thinking in learning to evaluate, use evidence and ask questions;
- iv. recognising the centrality of inequality and social stratification;
- v. developing a sense of sociology as a field;
- vi. understanding how ideas are socially constructed;
- vii. recognising the relationship between sociology and other social sciences;
- viii. applying their learnings in sociology to the real world; and
- ix. understanding the importance of key social institutions in society.

Additional themes included cross-cultural and socio-historical awareness (Persell, et al., 2007). The Australian TLOs are consistent with these, as are results in the broader and more recent literature (Fujieda, 2009; Greenwood, 2013; Zipp, 2012). Important themes in the literature also include the need for active engagement with contemporary issues and with research practice as part of the process of learning key sociological theories, evaluating evidence, and undertaking critical reflection (Berheide, 2005; Greenwood, 2012; McKinney et al., 2004; Schwalbe, 2007). Particularly important for students’ understanding of sociology is critical self-reflection as they apply the sociological imagination to their own lives. Rusche and Jason (2011) maintain that students will understand sociology better if they ‘recognize themselves as actors in social life and not merely as passive students learning these concepts in the abstract’ (p. 339). Rusche and Jason (2011) and Schwalbe (2007) provide ideas and examples of how to do this.

A ‘signature pedagogy’ provides strategies for engaging students in sociology with thinking and learning in the context of the discipline according to Fujieda (2009). Poole (2007) argues that sociology does not have an obvious signature pedagogy in the same way that law uses case studies or engineering uses design projects, but the active engagement of students in contemporary issues, systematic research practice and critical self-reflection, as suggested above, would generally be accepted as good teaching practice in sociology. Poole (2007) emphasizes that, for sociology, learning environments should implicitly and explicitly foster and reinforce students’ sociological ways of knowing by, for example, using the perspective of the sociological imagination (Mills, 2000(1959)) or sociological mindfulness (Schwalbe, 2007). Fujieda (2009) proposes a more specific signature pedagogy for sociology: that of teaching theory as a story that was constructed by each theorist, rather than as a set of abstract ideas.

There are other concerns in relation to teaching and learning across the undergraduate years, both generally and specifically in relation to the sociology disciplines. Williams (2005) suggests that when academics and teachers have been studying in their discipline for a long time, the discourse, ways of thinking and discipline ‘rules’ may have become second nature to them. Such tacit knowledge may make it difficult for them to be explicit in teaching students how to engage with the discourses in the discipline.

Threshold concepts are often challenging or troublesome, especially initially, and students may not learn them in a linear fashion (Adler-Kassner, Majewski & Koshnick, 2012; Meyer & Land, 2003). They may confront students' existing beliefs or their past practices. For example, students in first year must be introduced to the discourses of sociology but these discourses might clash with the discourses that the students experience at home or through the media (Kapp & Bangeni, 2009). They may also differ from the discourses that students employ in other disciplines, especially if they are taking a general degree like a Liberal Arts degree, Bachelor of Arts or Bachelor of Social Science (Williams, 2005).

One of the challenges to students' learning in sociology is that they may view the discipline as being biased and subjective or a criticism of their own culture or society according to Fujieda (2009). Fujeida proposes that although this could be seen as an obstacle to student learning, it can be used to emphasize their unexamined observations and show them how theoretical approaches can help them understand a topic in a deeper way. Students can be taught to analyse their own dispositions and evaluate their own perceptions and biases. Adler-Kassner, Majewski and Koshnick (2012) support this by suggesting as learners become more proficient, they should also develop their metacognition of what they know, how they know it and how they can apply it.

3. Project Methodology

3.1 Overview of Methodology

The project methodology had four stages:

- i. a literature study was undertaken at the start to identify the skills and concepts that first-year students in sociology were thought to require;
- ii. a survey was undertaken of first-year sociology students. One open ended question is relevant for this paper and the results are discussed briefly later;
- iii. a workshop was held in November 2013. The workshop had the dual purpose of engaging lecturers with the TLOs and their implications for first year, and of using the expertise of the group to collect ideas for what could be undertaken in first year to prepare students to meet the TLOs on graduation;
- iv. a working group of three academics who had participated in the workshop and had been consulting throughout the project with the project team then brought the ideas from the literature study, student survey and workshop together to formulate the website. Each TLO was expanded to answer the research questions identifying what students needed to know and be able to do; what barriers there might be to their learning, and what strategies could be used to facilitate that learning. Further literature was consulted to expand on the ideas collected in the workshop.

Ethics approval for the collection of data in the project was obtained through the Australian Catholic University Research Ethics Committee (ID 2013 49V) and accepted by the ethics committees for the six other universities participating in the project.

3.2 Student Survey

The student survey was undertaken before the workshop. First year sociology students from 4 of the 7 universities participating in the study were invited to participate in the survey. There were 123 responses. The demographic data is provided in Table 1. The students had completed their first semester in sociology and were at the start of their second semester. Seventy-eight percent of the participants were female. Only 39 percent of students were planning on taking sociology as a major with 26 percent saying that the subject was compulsory for the degree that they were taking.

Table 1. Demographic data

Item	Value	N	Percentage (rounded)
Number of students		123	
Gender	Male	27	22%
	Female	96	78%
Studying Sociology	As a major	48	39%
	As a minor or elective	43	35%
	As a compulsory subject in a degree	32	26%

A detailed discussion of the survey results is beyond the scope of this paper. One of the open-ended questions is

relevant in that it informed the further work undertaken on identifying the bottlenecks that students experience in the study of sociology. The question asked students to explain what they found difficult about studying sociology (if anything). An overview of the results for this question is provided in Table 2.

Of the 123 students who completed the survey only 61 answered the question on what they found difficult. The most common issue (mentioned by 31 students) was the difficulty in understanding the different theories and abstract concepts used in sociology. Three students also said that they had difficulty with the terminology. The second most common issue for the students was the amount of reading (8 students) and managing their time (4 students). Other difficulties mentioned by only one or two students were that they found some of the issues discussed boring or not of interest to them. Two students said that they were confronted by some of the issues discussed.

Table 2. Difficulties experienced by first-year students studying sociology

Item	Value	N	Percentage students (Percentage of the 61 responses)
Open ended questions		61	
Difficulties	Understanding theory and abstract concepts	31	25% (51%)
	Amount of reading	8	6.5% (13%)
	Managing time	4	3.2% (6.5%)
	Difficulty with terminology	3	2.4% (4.9%)
	Confronted by certain issues discussed	2	1.6% (3.2%)
	Issues discussed were boring	2	1.6% (3.2%)

3.3 The Workshop

A day-long workshop for sociology lecturers was held in November 2013. The workshop had two purposes:

- to engage lecturers with the TLOs and thinking about their implications for first year, and
- use the expertise of the group to gather ideas to answer the three research questions.

There were 37 participants drawn from 14 different universities from across Australia. The demographics of the group are shown in Table 3. Twenty-one participants were from metropolitan universities and 16 were from regional universities. Twenty-eight were lecturers in sociology. Nine participants were not sociologists but had responsibility for curriculum development across multiple disciplines (including sociology).

Table 3. Demographics of participants at the sociology workshop

Item	Value	N
Number of participants		37
Number of universities		14
Type of university	Metropolitan	21
	Regional	16
Primary responsibility	Sociology lecturer	10
	Sociology senior lecturer	9
	Sociology associate professor	6
	Sociology professor	3
	Cross-discipline curriculum developer	9

The one-day workshop was organized around a number of interactive sessions designed to facilitate the participants' learning of the TLOs and their implications for first year. The workshop also used the participants' expertise to generate and share ideas. This section will focus on the techniques used to collect the ideas related to the three research questions:

3.3.1 What Bottlenecks Are There to Students Learning in Sociology?

We used part of the Decoding the Disciplines Methodology (Middendorf & Pace, 2004) to engage the participants with thinking about the bottlenecks to students learning in first-year sociology and to consider strategies that they might use, as lecturers, to mitigate those bottlenecks.

First, we asked the participants to identify possible bottlenecks and arrange them into themes. As an example, the bottlenecks that they identified as relating to the theme of applying sociological theories, concepts and evidence to sociological questions were:

- the abstract character of sociological thinking;
- the relationship between theory, methods and real world thinking;
- the language of sociology – students see theory and concepts as jargon; and
- understanding the sociological imagination.

The student survey results were used to triangulate their ideas with the issues that the students raised. We then asked each group to take one of the bottlenecks and follow the next three steps of the Decoding the Disciplines Methodology while thinking about first-year pedagogy principles. These steps were: to identify how an expert would address the bottleneck; how they as lecturers might break down the expert's methods to explicitly teach them to students; and how to design a way of enabling students to practice the methods. The exercise was used to get the participants thinking about strategies that they might use and the threshold concepts students need to learn in sociology, rather than focusing on the content to be taught.

After the workshop the bottlenecks were re-organized into themes related to each of the TLOs and used to identify what students needed to learn in first year and the barriers to their learning. This is discussed later in the paper.

3.3.2 What do Students Need to Learn at First Year to Put Them on the Path to Meeting TLOs on Graduation?

Conversation maps (McKenzie, 2010) were used to stimulate ideas about what concepts and skills students needed to learn at first year in sociology in order to meet the TLOs for sociology by the time they graduate. The TLO was placed in the middle of a large sheet of butcher's paper and participants were asked to add to the 'conversation' their ideas about what students needed to learn and how to teach them. They read what was on the paper and then added their thoughts and ideas using arrows to link their ideas to those already on the paper. They could ask questions, propose ideas or comment on what others had put on the paper. Some used smiley faces or ticks to show their support for an idea. Figure 2 provides an example of what part of the conversation map for "TLO4 Demonstrate an ability to apply sociological theories, concepts and evidence to sociological questions" looked like.

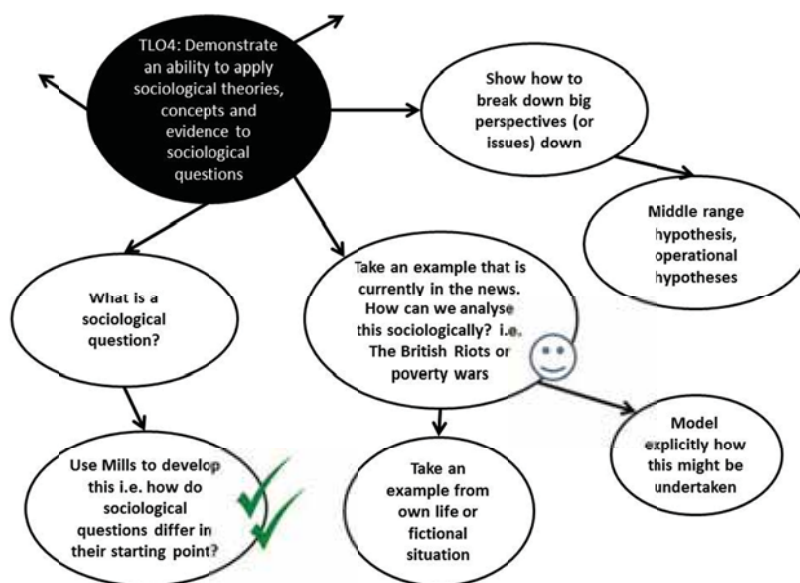


Figure 2. Example of part of conversation map for *TLO 4*

The conversation maps proved effective in sharing and debating the ideas of the entire group. They also functioned as a way of capturing ideas of a large group, similar to the way a focus group would. The conversation maps were analysed afterwards to provide ideas of what students should know and what strategies could be used.

The conversation maps were followed by further in-depth discussions on strategies that could be used to help students develop their capabilities towards meeting the TLOs. Participants shared ideas in small groups and then with the larger group. These ideas were collected and placed in a resource bank available on the website.

4. The Results: Learning in First Year Sociology

The workshop results were analysed and developed, along with ideas from the literature and the student survey, by a working group of three academics/teachers who had participated in the workshop and had been consulting with the project team throughout the project, providing detailed guidance for each TLO.

It should be stressed that the workshops were intended to inform lecturers about the TLOs, to stimulate explicit reflection about teaching and learning sociology, and to provide material for the website. These results should be regarded as a basis for ongoing reflection, development and revision. Each TLO is discussed in relation to what students need to know and do in order to meet the TLO, and what barriers there might be to their learning. Examples are then given of the teaching techniques. There is some overlap in techniques proposed for the TLOs as one technique could be used to help students develop several skills and understandings. This paper provides an abbreviated version of what is on the website (Sociology, 2015). The project report can be found at Thomas et al. (2015). A framework of questions to ask when undertaking first year curriculum development can be found at Lawrence et al. (2016).

TLO1 Demonstrate a sociological understanding of the nature of social relationships and institutions; patterns of social diversity and inequality; and processes that underpin social change and stability.

First-year students in sociology should develop a basic sociological understanding and engage with debates about social diversity and inequality. In first year we need to link this to what they know, but also open up a way of thinking about social relationships, diversity, inequality and social change that many of them may be unfamiliar with. They should recognize that individuals are influenced by society and that they do not act in isolation. At first year they should be able to identify processes of social change and stability and why societies change.

Students may find it difficult to understand the way in which social relationships influence individual behavior because these influences are invisible” or tacit. Students may have difficulty with debating diversity and inequality because they have had little opportunity to interact or learn about people outside their own class, gender, nationality, religion, ethnic, racial, or sexuality groups. They often have a ‘common-sense’ understanding of social inequality as the result of individual deficit or ‘bad luck’, but have had little lived experience of social inequality.

Examples of strategies to help students learn these concepts are:

- Use class participants’ own experience (where safe) to explore diverse experiences (Walter & Butler, 2013).
- Use TV shows such as “Who Do You Think You Are?” to link individuals with social institutions and relationships.
- Have students obtain and compare, and/or interpret data on various aspects of social diversity and inequality (for example income, education, health and welfare from local municipal areas in their own cities and then contrast these with different socio-economic, ethnic populations.)
- Get students to trace global and social relationships by investigating questions like “where do my jeans/shoes/coffee come from?” in order to trace global social and economic relationships. See for example Ben Cushing’s (2012) clip on coffee.
- Use concrete case studies of social change and stability to analyse and understand patterns of social change and stability for example:
 - Technology-mediated communication, patterns of marriage and sexuality, the enduring levels of unemployment affecting students’ job chances, climate change (Hoop, 2012);
 - Historical patterns of change – such as changes to the family in the industrial revolution;
 - Contemporary case studies of rapid change – such as the rise of fundamentalism or the pro-democracy movements in China and middle east;
 - The capacity of an event to influence society (for example a Port Arthur and the gun buy-back scheme in Australia).

TLO 2 Demonstrate knowledge of sociology as an academic discipline in its social, historical and world context, including its principal concepts and theories.

First-year students should be introduced to the historical and social origin of sociology, how it fits in with other disciplines, and how it is evolving in response to the new contexts and demands of the contemporary world. At first year they should understand the nature of sociology as a discipline and how it differs from other disciplines. They should be able to recognize the way in which sociological practices are ingrained in contemporary society and the importance of context in understanding a social situation.

A barrier to students learning this may be when they see disciplines as ‘truths’ rather than as human enterprises which develop and change under specific social, cultural and historical circumstances, and which are complementary to other disciplines. It is not always obvious how disciplines such as sociology have contributed, and are contributing, to society.

Examples of strategies to help students learn these skills are:

- Introduce sociology’s story complete with its rationale and its unique, pivotal, eccentric people and their contexts.
- Compare this sociology story with stories from other disciplines, cultures, regions, nations and from marginalized groups in the Euro-centric world (Alatas & Sinha, 2001; Connell, 2007).
- Use the four components of the Sociological imagination – history, culture, structure and critique, as a framework for first year (Willis, 2011), to discuss how and why the classic sociologists thought as they did and whether their ideas are still relevant.
- Discuss the ways in which sociological ideas and practices have become part of the fabric of modern society – e.g. social research input to social policy.

TLO 3 Demonstrate an understanding of research processes in sociology, including design, methodology and methods, ethics, analysis, interpretation, and the diversity of approaches to research.

First-year students should start to build an understanding and skills in sociological research design and methodology. They should be introduced to the purposes of research, some of the major research paradigms, how research is structured and why research is so important to the discipline. While they would not be expected at first year to undertake a full research project they can be introduced to a small variety of techniques and skills that they can apply later in the course.

Students may find research design and methods technical and demanding and may not understand their use and relevance in the real world. If we try to introduce them to too many research paradigms at too detailed a level, this may overwhelm them.

Examples of strategies to help students engage with these issues are:

- Develop students’ library and research skills and teach them where to find and how to recognize good quality research in sociology.
- Develop students’ capacity to see how pervasive research is about sociological issues and how it is reported and used (e.g. documentaries, radio shock jocks).
- Incorporate case studies of how sociological research is used across a range of public and private sector jobs.
- Use guest speakers/films of quantitative and qualitative research being done in the field across different areas or use your own experience if possible.
- Introduce a topic and provide data. Ask students what the data tells us about the topic.
- Discuss case studies of research ethics abuses to drive home the importance of ethics.

TLO 4 Demonstrate an ability to apply sociological theories, concepts and evidence to sociological questions.

First-year students should be expected to understand the nature of, and engage with, sociological questions. In first year, these could be those about issues of importance to young people. They should be given practice in identifying and creating appropriate sociological questions. Students should be given opportunities to engage with the way in which sociological theories, concepts and evidence are applied and used.

Sociological theories and concepts are difficult concepts for first-year students who may not understand the types of questions sociologists ask and how these differ in their starting point from other approaches. They also may not understand why these sorts of questions are important for society. Students find it difficult to think abstractly about theories and concepts.

Strategies that can be used to help students to grasp these concepts and develop their skills are:

- Take a contemporary issue such as obesity (Egger & Swinburne, 2010), gay marriage, mental illness, or (for something lighter) the interest in vampires or Harry Potter in popular culture. Apply and contrast different approaches to each topic, for example: common sense, economic, medical, psychological, political and sociological.
- Introduce theories and concepts gradually based on concrete discussions about students' own lives (see TLO 2) and concurrently with the gradual introduction of research design and methods (see TLO 3).
- Take an example that is currently in the news and model how a sociologist would analyse the event. What different questions would a sociologist ask? How could these questions then be researched? What would constitute evidence? Who could use the results and why?
- Use Mills' work on sociological imagination to help students understand the way sociological questions probe connections between private, individual issues and social issues (Mills, 2000 (1959)).

TLO 5 Demonstrate an ability to critically review, analyze, summarize and synthesize sociological scholarship including research using quantitative and qualitative data.

At first-year students should engage with the scholarship of sociology including qualitative and quantitative research, and start to develop the skills they will need to undertake a critical review or analysis and to summarize and synthesize information and arguments. They should be able to select, analyse and evaluate a research article in terms of its structure, authority, currency, relevance and accuracy.

The first-year student may not know how to read scholarly sociological literature with discrimination, including evaluating ideas, arguments and evidence. They may not be able to summarize/paraphrase and synthesize arguments and evidence. At the first-year level, students will need to learn to apply critical analysis skills alongside learning about research design and sociological theories.

These skills and capabilities will require careful scaffolding through the course. Some of the strategies that can be used in first year are:

- Embed academic literacy skills into the teaching of units and assessments, including library research skills (Ciabattari, 2013).
- Students can be asked to select a research article, summarise it, assess its structure (for qualitative quantitative or mixed methodologies) and evaluate it in terms of its structure, authority, currency, relevance and accuracy.
- Using sociological content, model reading, paraphrasing, summarizing, analysis and synthesis, breaking these down into specific steps for students.
- Ask students take turns reading the first page of text aloud and discuss difficult words and how to work out their meaning.
- In small groups, deconstruct parts of brief, interesting, sociological articles and identify critical, analytic, synthetic elements, including theoretical perspectives and evidence.
- Give students 'common sense' arguments and explanations and ask students to critique these from a sociological point of view.

TLO 6 Demonstrate an ability to develop arguments by using evidence, evaluating competing explanations, and drawing conclusions.

First-year students should be supported to develop confidence and skills in developing their own arguments by using evidence, evaluating competing explanations, and drawing conclusions. Students need help to move beyond their own opinions, cope with multiple perspectives, and gain the confidence to develop and express their own arguments (Massengill, 2011). They need to develop the familiarity and confidence to apply a range of sociological academic literacy skills modelled in scholarly work, to their *own* practice of developing arguments, using evidence, evaluating competing explanations and drawing conclusions.

Students often lack confidence in presenting their own arguments, thinking that lecturers want their own ideas presented back to them, or thinking they might have the 'wrong' argument. Others may have their own opinion but it is not informed by appropriate evidence and critical analysis.

Strategies that could be useful to help first-year students develop these skills are:

- Show how evidence doesn't always support commonly received points of view on issues.
- Engage students in class debates over real controversies:
 - where arguments and evidence need to be offered for differing positions;

- where students are asked to offer evidence for their own points of view; or
- where students are asked to take the perspective of those they don't agree with.
- Offer competing evidence and/ or theories about a particular issue and ask students to demonstrate how they would develop a sociological argument to support different interpretations. Explicitly model and scaffold the development of the skills required.
- Transfer to students' own practice through cumulative development of students' own written work, beginning with short assignments highlighting key skills in first year (parallel with comprehension and reading exercises), using sociological content.

TLO 7 Demonstrate an ability to communicate sociological ideas, principles and knowledge to specialist and non-specialist audiences using appropriate formats.

First-year students need to be able to use and explain the terminology of the discipline. They should develop the capacity to conceptualize and explain sociological ideas, principles and knowledge in contexts outside the discipline itself.

First-year students often have difficulty with the terminology used in sociology and this hinders their ability to communicate concepts effectively. They may not appreciate the existence of different audiences and communicative strategies applicable to the different audiences.

Some strategies that can be used to help students develop their communication of sociological concepts are:

- Ask students to write 'reader's comments' from a sociological point of view on current news articles.
- Create short downloadable 'think alouds' by academic staff unpacking sociological texts/ideas and terminology.
- Use peer exchange activities (rather than class presentations) to develop confidence in communication of sociological ideas to a small group.
- Use social media such as blogs, Twitter to encourage students to express and communicate sociological ideas: e.g. using Twitter to comment on programs such as Q and A; writing a sociological blog "one sociological thought per day" (Bassett, 2016).

5. Conclusions

Curriculum development in sociology needs to be a social process where lecturers work collaboratively to plan the discipline offerings from first year through to graduation so that they meet the needs of our students and our communities (Greenwood, 2013; McKinney, 2007). We believe that students will benefit if lecturers, teaching into first year, focus on developing student skills and capabilities with a view to them cumulatively attaining a full range of skills and concepts agreed across the discipline as desirable and valuable for sociologists.

The results presented in this paper suggest ways in which the Australian TLOs for sociology can be developed from first year taking into consideration the needs of the first-year student. They are not prescriptive and could be applied to a wide variety of concepts and content within the sociology discipline. We argue that first year lecturers should focus on the skills and concepts we want sociology students to learn at first year and then teach these using the content, rather than focussing on introducing students to a wide variety of content without providing them with the skills that they will need as a sociology student and sociologist.

The techniques used in this study to facilitate first-year lecturers thinking about their curriculum holistically have been tested across five disciplines, including sociology. We believe that these techniques could be useful to universities and disciplines in their curriculum design. An external evaluator for the project has followed up with some of the participants who reported ongoing formal and informal curriculum development at their institutions.

The website (Sociology, 2015) and good practice guides (available on the website) offer a collection of ideas that teachers in sociology can use to stimulate their students' thinking and help them become effective learners in the discipline. The resources are also useful in helping teachers become more explicitly aware of learning and teaching techniques in relation to their discipline. Future research might investigate the effectiveness of these ideas and might also develop assessment tasks across the three years of the degree to measure whether students develop and achieve success by the time they graduate.

Acknowledgements

Support for this project has been provided by the Australian Government Office for Learning and Teaching. The views expressed in this article do not necessarily reflect the views of the Australian Government Office for Learning and Teaching.

References

- Adler-Kassner, L., Majewski, J., & Koshnick, D. (2012). The value of troublesome knowledge: transfer and threshold concepts in writing and history. *Composition Forum*, 26. Retrieved from <http://compositionforum.com/issue/26/troublesome-knowledge-threshold.php>
- Alatas, S., & Sinha, V. (2001). Teaching classical sociological theory in Singapore: the context of Eurocentrism, *Teaching Sociology*, 29(3), 316-331.
- ALTC (2011). *Resources to assist discipline communities to define threshold learning outcomes (TLOs)*. Retrieved from <http://www.olt.gov.au/resource-library?text=threshold%20learning%20outcomes>
- Bassett, S. (2016). *Podology: Sociology*. Retrieved from <http://www.podology.org.uk/#/the-impact-of-new-media/4563962604>
- Bovill, C., Bulley, C. & Morss, K. (2011). Engaging and empowering first-year students through curriculum design: perspectives from the literature. *Teaching in Higher Education* 16(2), 197-209, <https://doi.org/10.1080/13562517.2010.515024>
- Berheide, C. (2005). Searching for structure: Creating coherence in the sociology curriculum, *Teaching Sociology*, 33(1), 1-15. <https://doi.org/10.1177/0092055X0503300101>
- Ciabattari, T. (2013). Creating a culture of good writing: a cumulative model for teaching writing in the sociology major. *Teaching Sociology*, 41(1), 60-69. <https://doi.org/10.1177/0092055X12462415>
- Collins, R. (1992). *Sociological insight, an introduction to non-obvious sociology*. Oxford: Oxford U. Press.
- Connell, R. (2007). *Southern Theory*. Cambridge: Allen and Unwin.
- Cushing, B. (2012). *Ben Cushing sociology and coffee*. Retrieved from <https://www.youtube.com/watch?v=KiNM9114Hqs>
- Egger, G., & Swinburne, B. (2011). *Planet Obesity: How we're eating ourselves and the planet to death*. St Leonards, Australia: Allen and Unwin.
- Fujieda, E. (2009). Signature pedagogy and the sociological imagination. In R. Gurung, N. Chickand, & H. A. Sterling (Eds), *Exploring signature pedagogies* (pp.183-206). Virginia: Stylus.
- Greenwood, N.A. (2013). Towards publicly responsive sociology curricula, *Teaching Sociology*, 41(3), 232-241. <https://doi.org/10.1177/0092055X13485026>
- Hoop, K. (2012). Comte unplugged: using a “technology fast” to teach sociological theory. *Teaching Sociology*, 40(2), 158-165. <https://doi.org/10.1177/0092055X12437973>
- Kapp, R., & Bangeni, B. (2009). Positioning (in) the discipline: Undergraduate students’ negotiations of disciplinary discourses. *Teaching in Higher Education*, 14(6), 587-596. <https://doi.org/10.1080/13562510903314988>
- Kift, S. (2009). Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education, Final Report for ALTC Senior Fellowship Program. Retrieved <http://fyhe.com.au/wp-content/uploads/2012/10/Kift-Sally-ALTC-Senior-Fellowship-Report-Sep-092.pdf>
- Kift, S., Nelson, K., & Clarke, J. (2010). Transition Pedagogy: A third generation approach to FYE – A case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, 1(1), 1-20. <https://doi.org/10.5204/intjfyhe.v1i1.13>
- Land, R. & Meyer, J. (2006). Threshold concepts and troublesome knowledge: An introduction. In R. Land & J. Meyer (Eds), *Overcoming barriers to student understanding: Threshold concepts and troublesome knowledge* (pp.3-18). London: Routledge.
- Lawrence, J., Allen, P., Thomas, T., Wallace, J., Clark, J., Jones, A., Cole, B. & Sheridan Burns, L. (2016). A framework for first year curriculum design and pedagogy: intersecting the Threshold Learning Outcomes, disciplinary knowledge and the first year pedagogy principles, *Proceedings of STARS Conference, Perth, Australia 29 June-2 July, 2016*, Retrieved from <http://unistars.org/papers/STARS2016/12B.pdf>
- Massengill, R. (2011). Sociological writing as higher-level thinking: assignments that cultivate the sociological imagination, *Teaching Sociology*, 39(4), 371-381. <https://doi.org/10.1177/0092055X11407350>
- Marshall, H. (2009). *Teaching sociology in Australia*, Australian Learning and Teaching Council, Retrieved from <http://apo.org.au/node/21357>

- McKenzie, B. (2010). *Conversation Mapping: An Overview*. Retrieved from <https://www.youtube.com/watch?v=uqwL4k2easU>
- McKinney, K. (2007). The student voice: sociology majors tell us about learning sociology. *Teaching Sociology*, 35(2), 112-124. <https://doi.org/10.1177/0092055X0703500201>
- McKinney, K., Howery, C., Strand, K., Kain, E., & Berheide, C. (2004). *Liberal Learning and the Sociology Major Updated: Meeting the challenge of teaching sociology in the 21 century*. American Sociological Association. Retrieved from http://www.asanet.org/documents/teaching/pdfs/Lib_Learning_FINAL.pdf
- Meyer J., & Land, R. (2003). Threshold Concepts and Troublesome Knowledge 1 – Linkages to Ways of Thinking and Practising. In C. Rust (Ed), *Improving Student Learning – Ten Years On* (pp. 412-424). Oxford: Oxford Centre for Staff Learning and Development.
- Middendorf, J., & Pace, D. (2004). Decoding the disciplines: Helping students learn disciplinary ways of thinking. *New Directions for Teaching and Learning*, 98, 1-12. <http://doi.org/10.1002/tl.142>
- Mills, C. W. (2000(1959)). *The sociological imagination*. New York: Oxford University Press.
- Nelson, K. (2014). Keynote: The First Year in Higher Education – Where to from here? *The International Journal of the First Year in Higher Education*, 5(2),1-20. <https://doi.org/10.5204/intjfyhe.v5i2.243>
- Nicol, D. (2009). *Transforming assessment and feedback: enhancing integration and empowerment in the first year*. Scottish Enhancement Themes: The First Year Experience. Mansfield, Scotland: The Quality Assurance Agency for Higher Education. Retrieved from <http://www.enhancementthemes.ac.uk/pages/docdetail/docs/publications/transforming-assessment-and-feedback>
- Poole, G. (2007). Using the scholarship of teaching and learning at disciplinary, national and institutional levels to strategically improve the quality of post-secondary education, *International Journal for the Scholarship of Teaching and Learning*, 1(2), 1-16. <https://doi.org/10.20429/ijstl.2007.010203>
- Percell, C., Pfeiffer K., & Syed A. (2007). What should students understand after taking Introduction to Sociology? *Teaching Sociology*, 35, 300-314. <https://doi.org/10.1177/0092055X0703500401>
- QAA (2007). *Subject benchmark statement: Sociology*. Retrieved from <http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement-Sociology.pdf>
- Rusche, S. N., & Jason, K. (2011). You have to absorb yourself in it: Using inquiry and reflection to promote student learning and self-knowledge, *Teaching Sociology*, 39(4), 338-353. <https://doi.org/10.1177/0092055X11418685>
- Schwalbe, M. (2007). *The sociologically examined life: Pieces of the conversation* (4th ed.). N. Y.: McGraw Hill.
- Sociology. (2015). *In the beginning: Revitalising first year curriculum*, *Sociology*. Retrieved from <http://www.firstyearlearningthresholds.edu.au/sociology/>
- TASA (2012). *Sociology: Threshold learning outcomes*. The Australian Sociological Association. Retrieved from <https://www.tasa.org.au/wp-content/uploads/2011/12/threshold-learning-outcomes-for-sociology-final.pdf>
- Tinto, V. (2012). Enhancing student success: Taking the classroom success seriously, *The International Journal of the First Year in Higher Education*, 3(1), 1–8. <https://doi.org/10.5204/intjfyhe.v2i1.119>
- Tuning (n. d.). *Tuning Educational Structures in Europe*. Retrieved from <http://www.unideusto.org/tuningeu/subject-areas.html>
- Walter, M., & Butler, K. (2013). Teaching race to teach Indigeneity. *Journal of Sociology*, 49(4), 397-410. <https://doi.org/10.1177/1440783313504051>
- Williams, K. (2005). Lecture and first year student (mis)understandings of assessment task verbs: Mind the gap, *Teaching in Higher Education*, 10(2), 157-173. <https://doi.org/10.1080/1356251042000337927>
- Zipp, J. (2011). Hans O.Mauksch Address: Teaching for whom? *Teaching Sociology*, 40(4), 301-311. <https://doi.org/10.1177/0092055X12455650>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Effects of Chinese Sport Tourists' Perceptions toward Service Quality in Jeju Island

Shiheng Zeng¹, Sung-Bum Chun¹, Weisheng Chiu², Chanmin Park³ & Chul Won Lee¹

¹ Department of Sport Industry Studies, Graduate School, Yonsei University, Seoul, Republic of Korea

² Department of Sport and Leisure Studies, Keimyung University, Daegu, Republic of Korea

³ Physical Education and Sports Science, Nanyang Technological University National Institute of Education, Singapore.

Correspondence: Chul Won Lee, Department of Sport Industry Studies, Yonsei University, Seoul, Republic of Korea. Tel: 82-2-2123-3186. E-mail: wakeford@yonsei.ac.kr

Received: February 2, 2017

Accepted: February 24, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p14

URL: <https://doi.org/10.5539/ass.v13n4p14>

Abstract

Purpose: This study proposed a research model to examine the effect of the service quality of the sport tourism industry on Chinese tourists' satisfaction and future intention and subjective well-being in Jeju Island.

Methodology: Data were recruited from 349 Chinese tourists, who participated in sport activities in Jeju Island.

Findings: The findings indicate the physical environment quality and outcome quality have positive influences on tourist satisfaction. Tourist satisfaction significantly and positively influenced tourists' future behavioral intentions and subjective well-being. All Chinese respondents positively evaluated the service quality in Jeju Island.

Value: This study contributes to the understanding of the sports tourism industry targeting Chinese tourists in Jeju Island.

1. Introduction

Jeju Island is one of the most popular destinations for Chinese tourists. In 2014, approximately 2,859,000 Chinese tourists visited Jeju, accounting for 86% of the island's 3,328,300 foreign visitors (Jeju Tourism Organization, 2015). The sports tourism industry is also one of the major attractions in Jeju Island, offering many leisure, sports, and recreational activities, including golfing, horse riding, hunting, fishing, and mountain climbing (Jeju Special Self-Governing Provincial Tourism Association, 2015). Although sporadic studies have addressed Jeju Island as an important destination for the Korea tourism industry (Park & Njite, 2010; Seo, Park, & Yu, 2009), little attention has been paid to understanding the role of sports tourism as a destination attraction for international tourists.

Because the sports tourism industry is a service industry, it is strongly influenced by the quality of services (Thwaites & Chadwick, 2005). Many studies have suggested service quality and tourist satisfaction result in higher levels of tourist loyalty, which lead to economic gains for destination and tourism enterprises (Chen & Chen, 2010; Chen & Tsai, 2008; Hutchinson, Lai, & Wang, 2009). Similarly, it has been suggested that tourism can bring psychological benefits for tourists (Dann, 2012). However, studies examining antecedents of psychological benefits are limited (McCabe & Johnson, 2013). Also, only a few studies have investigated the economic and socio-psychological effects of service quality on tourist satisfaction and future intention to revisit Jeju Island.

Therefore, the purpose of this study was to explore how Chinese tourists' perception of service quality toward sports activities in Jeju Island affects their satisfaction and future behavior. Subjective well-being is a socio-psychological outcome, and future behavioral intention is one of the important economic outcomes. Understanding Chinese tourists' subjective well-being and future behavioral intention can provide various implications for practitioners of sports tourism industry in Jeju Island. This study attempts to (1) explore the relationships among service quality, tourist satisfaction, and its outcomes—future behavioral intentions and subjective well-being; and (2) evaluate Chinese sports tourists' perceptions of service quality toward sports

activities in Jeju Island.

2. Literature Review

2.1 Sports Tourism

From a broader point of view (Higham, 2007; Standeven & Knop, 1998), sports tourism is described as traveling for non-commercial reasons or business. It is also defined as all forms of active and passive involvement in sports activities in a casual or organized way for non-commercial or business/commercial reasons that necessitate travel away from home and work locality (Standeven & Knop, 1998). Gibson (1998) has proposed three recognizable types of sports tourism: visiting sports-related attractions, watching sporting events, and participating sports activities. In this study, we concentrate on active participation, also referred to as “active sports tourism.”

2.2 Service Quality

Although studies on service quality in the business world began in the early 1980s, the advantages of services quality in sports and recreational industry were noticed by researchers and practitioners in recent years. Service quality has attracted significant interest in sports marketing research (K Alexandris, Dimitriadis, & Kasiara, 2001; K Alexandris, Zahariadis, Tsozbatzoudis, & Grouios, 2004). There are distinguished studies regarding service qualities within sport occasions as well (Kelley & Turley, 2001; Shonk & Chelladurai, 2008; Tsiotras, & Tsiotras, 2006).

However, valid and reliable measurement of service quality has been a controversial issue in the service marketing literature (Brady & Cronin Jr, 2001). Most studies applied the SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1985). However, some have argued the SERVQUAL model is not fully applicable to sport, leisure, and recreational settings (Kouthouris & Alexandris, 2005). An alternative model, proposed by Brady and Cronin Jr (2001) and Rust and Oliver (1993), has been extensively applied to outdoor leisure research (Alexandris et al., 2004; Theodorakis, Kaplanidou, & Karabaxoglou, 2015). Theodorakis et al. (2015) posit three-dimension assessment of outdoor leisure services: outcome quality, interaction quality, and physical environment quality. “Outcome quality” relates to the fulfillment of a customer’s expectations after participating in an activity. “Interaction quality” refers to customers’ experience with activity personnel. “Physical environment quality” relates to service components, such as ambient conditions, social factors, and design of the activity.

2.3 Tourist Satisfaction

Satisfaction may be the most comprehensively researched variable in tourism literature. Satisfaction has been defined as the discrepancy between perceived performance and prior expectation after consumption (Oliver, 1980). According to Chen and Chen (2010), within the context of tourism, satisfaction is defined by the gap between pre-travel expectations and post-travel evaluations.

Satisfaction is viewed as a separate, but related, concept of service quality (Spreng & Mackoy, 1996). Zeithaml, Bitner, and Gremler (2006) assert satisfaction is the consumer fulfillment response. It is a judgment that a product, service feature, or the product or service provides a pleasurable level of consumption-related fulfillment (Zeithaml et al., 2006, p.86). Various studies in the service marketing literature have demonstrated these constructs are closely related (Alexandris et al., 2001; Spreng & Mackoy, 1996).

2.4 Future Behavioral Intentions

In the tourism literature, it is an acceptable notion that, when the product, services, or other resources offered by travel destinations satisfy tourists, this could result in repeated visits and positive spoken words that influence colleagues and/or relatives (Meng, Tepanon, & Uysal, 2008). Several practitioners and researchers have closely examined the effect of tourist satisfaction on future behavioral intentions, and customer dissatisfaction and satisfaction have come to be seen as the driving force that shapes customers’ future behaviors and attitudes (Cole & Scott, 2004).

2.5 Subjective Well-being

Subjective well-being (SWB) has been defined as a broad concept that includes individual affective and cognitive reactions to their daily life (Deiner, Suh, Lucas, & Smith, 1999; Myers & Diener, 1995; Ryan & Deci, 2001). Specifically, SWB includes individual emotional responses (e.g., happiness), satisfaction with specific life domains, and satisfaction (overall or general life satisfaction) (Deiner et al., 1999; Dolan, Peasgood, & White, 2008; Frijters, Johnston, & Shields, 2008).

The extensive review of SWB studies has proven that many factors specifically affect SWB (Deiner et al., 1999;

Myers & Diener, 1995; Ryan & Deci, 2001). The processes that support the relationship between SWB and leisure have also been described (Brajša-Žganec, Merkaš, & Šverko, 2011).

Higher levels of sport and leisure participation have been linked to greater levels of SWB (Lemon, Bengtson, & Peterson, 1972). Earlier studies demonstrated a positive relationship between SWB and participation in physical leisure activities (Leung & Lee, 2005) and health-associated quality of living (Vuillemin et al., 2005).

The conceptual model and hypotheses were proposed based on the literature review (Figure 1).

Hypothesis 1: Physical environment quality will significantly influence tourist satisfaction.

Hypothesis 2: Interaction quality will significantly influence tourist satisfaction.

Hypothesis 3: Outcome quality will significantly influence tourist satisfaction.

Hypothesis 4: Tourist satisfaction will significantly affect future behavioral intentions.

Hypothesis 5: Tourist satisfaction will significantly affect subjective well-being.

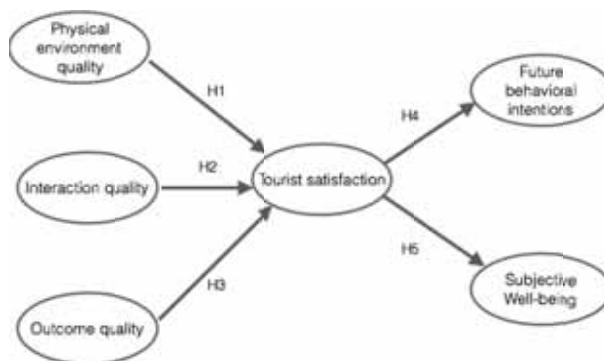


Figure 1. Conceptual mode

3. Method

3.1 Research Participants and Procedure

Chinese tourists, who have either recently or in the past participated in sports activities in Jeju Island (such as hiking, horse riding, or golfing) were targeted in this study. Data were collected in two stages by onsite and online surveys. The pilot survey was conducted in September 2015; 120 questionnaires were distributed, and 110 were selected as a final valid sample by removing the ten questionnaires with insufficient answers. The major survey was conducted from October to November 2015. The online survey was an Internet questionnaire distributed through the Chinese website <http://www.sojump.com>, and the onsite survey was conducted in Jeju Island. After removing 32 invalid questionnaires because of missing information, 349 questionnaires were selected as the final valid sample.

Of the respondents, 113 (32.4%) were male, and 236 (67.6%) were female. Most respondents (85.7%) were between 20 and 29 years of age ($n = 245$, 70.2%). Hiking was the most popular sporting activity among the respondents, cited by 42.0% ($n = 268$), followed by biking ($n = 74$, 11.6%) and swimming ($n = 63$, 9.9%). For participation spending, 32.7% of respondents spent less than 500 RMB (approximately 78 USD) on participation, and 28.7% spent 500–1000 RMB (approximately 78–157 USD). Finally, most respondents were first-time visitors to Jeju Island ($n = 272$, 77.9%), and the length of stay for most respondents was from 4 to 6 days ($n = 201$, 57.6%).

Table 1. Demographic information

	Concepts	N	%
Gender	Male	113	32.4
	Female	236	67.6
Age	Under 20	12	3.4
	20's	245	70.2
	30's	54	15.5
	40's	19	5.4
	Over 50	19	5.4

	Hiking	268	42.0
	Golfing	15	2.4
	Horse riding	37	5.8
	Biking	74	11.6
	Shooting	14	2.2
Participation activities (Multiple responses)	Speed driving	16	2.5
	Swimming	63	9.9
	Surfing	30	4.7
	Scuba diving	27	4.2
	Fishing	30	4.7
	Sky diving	14	2.2
	Others	50	7.8
Participation cost (RMB)	Below 500	114	32.7
	500–1000	100	28.7
	1000–1500	45	12.9
	Above 1500	90	25.8
Number of visits	None	272	77.9
	1–3 times	74	21.2
	Over 4 times	3	0.9
Length of Stay (days)	1–3	119	34.1
	4–6	201	57.6
	Over 7	29	8.3

3.2 Research Instrument

The survey questionnaire was composed of 27 items. The service quality variable was measured by an 11-item and 3-dimension scale proposed by Alexandris et al. (2004) and Brady and Cronin Jr (2001). The scale of tourist satisfaction was a three-item measure developed by Fornell, Johnson, Anderson, Cha, and Bryant (1996). Future behavioral intentions (3 items) were adopted and modified from Boulding, Kalra, Staelin, and Zeithaml (1993). A three-item scale of subjective well-being developed by Theodorakis et al. (2015) was used to assess the perception of experiential purchases on people's happiness. All scale items were evaluated on a five-point Likert scale, ranging from (1) *strongly disagree* to (5) *strongly agree*. Also, six items with demographic information questions were included. One open-ended question "What disappointed you most during your sports tour in Jeju Island?" was included in the questionnaire.

To increase the accuracy of the translation, a professional translator translated the original English version into Chinese, and other translators did a back translation into English from Chinese. In addition, native speakers checked the Chinese and English versions. This procedure was performed following the guidelines for blind back translation by Hsu, Kang, and Lam (2006).

3.3 Data Analysis

In the data analysis procedures, descriptive, inferential, and thematic analyses were employed to answer the research questions. The SPSS 20.0 (Statistical Package for Social Sciences) program and AMOS 19.0 (Analysis of Moment Structure) software were used to analyze the data.

4. Findings and Discussion

4.1 Confirmatory Factor Analyses

The measurement model revealed an adequate model fit and satisfied all criteria suggested by Hu and Bentler (1999), $\chi^2 = 422.729$, $df = 155$, $\chi^2/df = 2.727$, CFI = .957, TLI = .947, RMSEA = .070.

Next, the reliability of the structural model was examined by CR and AVE values (Table 2). All CR values satisfied the criterion (0.70) set by Fornell and Larcker (1981). The CR values ranged from 0.820 (physical environment quality) to 0.922 (subjective well-being). All AVE values were also above 0.50, which exceeded the recommended level proposed by Hair, Black, Babin, Anderson, & Tatham (2006). The AVE values ranged from 0.536 (physical environment quality) to 0.798 (subjective well-being). Therefore, the structural model showed adequate reliability. Also, discriminant validity was examined by correlation analysis among the latent variables

(Fornell & Larcker, 1981). The correlation analysis results (Table 3) showed none of the correlations were above the suggested 0.85 cut-off value (Kline, 2016). The highest correlation was 0.794 between subjective well-being and tourist satisfaction, showing the structural model had good measurement properties.

Table 2. Summary results of measurement model

Construct	Number of Items	Cronbach's alpha	Factor loadings	CR	AVE
PQ	4	.810	.671–.750	.820	.536
IQ	4	.914	.807–.882	.904	.703
OQ	3	.902	.854–.893	.916	.783
SAT	3	.886	.793–.883	.886	.721
FBI	3	.919	.849–.918	.920	.793
SWB	3	.910	.841–.937	.922	.798

Note: PQ: physical environment quality; IQ: interaction quality; OQ: outcome quality; SAT: tourist satisfaction; FBI: future behavioral intentions; SWB: subjective well-being

Table 3. Factor correlations between constructs

Factor	PQ	IQ	OQ	SAT	FBI	SWB
PQ	1					
IQ	.682***	1				
OQ	.744***	.740***	1			
SAT	.751***	.742***	.779***	1		
FBI	.688***	.634***	.724***	.743***	1	
SWB	.692***	.665***	.777***	.794***	.771***	1

****p* < .001

4.2 Structural Equation Modeling Analysis

To examine the relationships between service quality, tourist satisfaction, and its outcomes—future behavioral intentions, and subjective well-being, structural equation modeling (SEM) was employed. The results showed the conceptual model demonstrated an adequate fit with $\chi^2 = 348.490$, $df = 160$, $\chi^2/df = 2.178$, CFI = .970, TLI = .964, RMSEA = .058 (Hu & Bentler, 1999). The results of hypotheses testing are reported in Table 4.

These results revealed physical environment quality and outcome quality significantly affect tourist satisfaction, supporting H1 and H3. This finding partially followed prior studies that service quality is a significant antecedent influencing customer satisfaction (Brady & Cronin Jr, 2001; Clemes, Brush, & Collins, 2011; Cronin Jr & Taylor, 1994; Rust & Oliver, 1993).

However, the path from interaction quality to tourist satisfaction was not significant, and H2 was not supported. This finding contradicts previous studies that personnel quality positively influenced satisfaction (Brady, Voorhees, Cronin Jr, & Bourdeau, 2006; Theodorakis, Kambitsis, & Laios, 2001; Yoshida & James, 2010). This may be attributed to the language barrier between Chinese tourists and Korean locals staff and residents. Many Chinese tourists do not feel comfortable communicating with staff in English or Korean. It is necessary to provide tourist information (e.g., maps, guides) in Chinese. (Lee, 2015). The other possible reason could be that interaction between sports tourists and the staff was limited. This is consistent with some previous findings (Theodorakis et al., 2015; Theodorakis, Tsigilis, & Alexandris, 2009) that interaction quality did not affect skiers' psychological attachment or loyalty to the ski center, unlike the physical environment and outcome quality. Also, Theodorakis et al. (2015) found an interaction component examined in the study had no significant effect on event satisfaction because runners in 5 km and 10 km races had little time to interact with event personnel. Therefore, it can be concluded that the interaction between Chinese sports tourists and service providers (e.g., Korean staff) in Jeju Island was limited due to the language barrier and the nature of the sports activities.

This study also found tourist satisfaction was a significant predictor of future behavioral intention and subjective well-being, consistent with previous findings (Chen & Chen, 2010; Chen & Tsai, 2008; Cronin Jr & Taylor, 1994; Hutchinson et al., 2009). In the sports tourism context, Clemes et al. (2011) found professional rugby spectators were more eager to recommend the activity to others, with a higher level of satisfaction. This is also consistent with Theodorakis et al.'s (2015) recent finding that highly satisfied sports event participants would be happier if they invested their leisure time and resources in similar future events.

Table 4. Results of structural equation modeling of the hypotheses

Hypothesis	Path	Standardized coefficient (β)	t-value	Empirical result
H1	PQ \rightarrow SAT	.561	3.492***	Supported
H2	IQ \rightarrow SAT	.084	1.066	Not supported
H3	OQ \rightarrow SAT	.329	2.515*	Supported
H4	SAT \rightarrow FBI	.864	18.195***	Supported
H5	SAT \rightarrow SWB	.912	19.054***	Supported

*** $p < .001$, * $p < .05$

4.3 Chinese Sports Tourists' Evaluation of Service Quality

In this phase, how Chinese sports tourists evaluate the service quality of sports activities in Jeju Island was investigated. As reported in Table 5, the mean score for the overall scale of service quality was 4.01 (between “agree” to “strongly agree”), indicating respondents held a relatively positive attitude toward service quality.

Physical environment quality. The Chinese respondents considered the environment in Jeju Island visually attractive and gave it high scores ($M = 4.34$). However, there is room to improve the quality of the physical environment in Jeju Island. The Chinese sports tourists, who answered the questionnaire, gave relatively low ratings for the item “the facilities prepared were adequate” ($M = 3.76$). Thus, the facilities in Jeju Island were still not well-equipped for Chinese tourists. As reported Table 6, facility shortcomings in the ratings could have reflected the inconvenience of transportation, which elicited the most complaints from Chinese respondents (19.4%). In Jeju Island, aside from renting cars privately, buses and taxis are the primary means of public transportation. As shown in Figure 2, there are 12 intercity bus routes around Jeju Island. Many locations have only one bus line, and stops are far between, especially in the central island. In addition, intervals between each bus are around 10 to 20 minutes or as long as 1 hour (All about Jeju Island, 2014). Improving the transport infrastructure in Jeju Island should be of decisive importance and urgency.

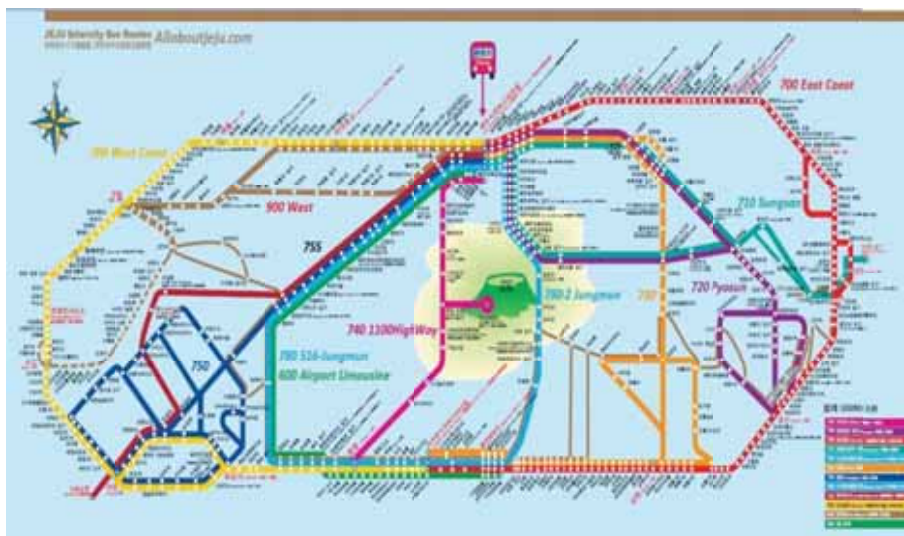


Figure 2. Jeju bus routes

(Data from All about Jeju Island (2014) <http://allaboutjeju.com/jeju-bus-routes/>)

Interaction quality. Many Chinese respondents gave relatively higher scores for the item “Staff were courteous” ($M = 4.04$) but lower scores for “staff were knowledgeable” ($M = 3.93$). As previously noted, there are a variety of service suppliers in the sports tourism sector (Chan, Hsu, & Baum, 2015; Shonk & Chelladurai, 2008; Thwaites, 1999). Sports tourists will probably encounter different service suppliers, including security employees, instructors, and tour guides. In the current context, knowledgeable staff might also refer to knowledge in a variety of areas, such as foreign languages and professional sports skills. The language barrier may be the biggest obstacle to the interaction between Chinese sports tourists and Korean staff in Jeju Island, since many Chinese respondents complained the “Servers providers could hardly understand Chinese, and there were huge difficulties in communication” (18.4%). To provide better service for Chinese tourists, we recommend destination marketers should expand their staff training and education in language and services for Chinese tourists (Lee, Jeon, & Kim, 2011).

Outcome quality. Outcome quality received the highest rating among the three predictors of service quality ($M = 4.12$). This suggests respondents were more conscious of what they gained from the sports tourism experience than of the physical environment or interaction factors. Several studies have noted outcome quality is close to the quality of experience (Kouthouris & Alexandris, 2005). Sports tourists could be considered “experience consumers,” and tourism organizations should consider themselves “experience providers,” and service providers should focus their marketing on the experience offered rather than the price (Chan et al., 2015). For example, destination marketing organizations (DMOs) could design new sports programs with more entertainment or open cultural arts festivals to provide memorable experiences for tourists in Jeju Island.

Table 5. Descriptive analysis of service quality

	Items	Mean	SD
Service quality ($M = 4.01$, $SD = .741$)	Factor 1: Physical environment quality ($M = 3.93$, $SD = .760$)		
	The environment in Jeju Island was visually attractive	4.34	.875
	The facilities prepared were adequate	3.76	.923
	Sport programs and events were well designed	3.78	.961
	Other customers did not affect the service negatively	3.85	1.042
	Factor 2: Interaction quality (Mean = 4.00, $SD = .866$)		
	Staff were responsive	4.03	.997
	Staff were courteous	4.04	.986
	Staff were knowledgeable	3.93	.925
	Staff provided prompt service	3.98	.976
	Factor 3: Outcome quality (Mean = 4.12, $SD = .844$)		
	It was a great sport tourism experience	4.07	.921
	Participating in the activities improved my health/sport skills	4.13	.953
	Participating in the activities made this trip more interesting	4.17	.893

Table 6. Categorized themes of open-ended question

Theme	N	%
1. Traffic inconvenience	20	19.4
2. Language barrier	19	18.4
3. Sport Activities content	15	14.6
4. High price	13	12.6
5. Food	8	7.8
6. Infrastructure	7	6.8
7. Staff/Tour guide	6	5.8
8. Shopping	6	5.8
9. Crowded	5	4.9
10. Climate	4	3.9
Total	103	100%

5. Implications

The current study investigated the relationships between service quality, tourist satisfaction, and its outcomes (i.e., future behavioral intentions and subjective well-being) to understand the role of service quality in participating sports activities in Jeju Island. Several theoretical and managerial implications emerged from the findings and are discussed below.

5.1 Theoretical Implications

First, the findings provide insight from the perspective of active sports tourists, unlike most previous studies that only focused on spectators of various sports (Brady et al., 2006; Shonk & Chelladurai, 2008; Theodorakis et al., 2001; Yoshida & James, 2010). This study targeted active sports tourists to investigate their perceptions of service quality in Jeju Island to expand the literature on sports tourism.

Second, the results contribute to the literature by revealing the dynamic interplay among service quality components and how they drive tourist satisfaction. While some studies have shown that evaluating service quality in the sports recreation industry is a multi-dimensional structure (Brady & Cronin Jr, 2001; Thwaites,

1999), few studies have explored each dimension specifically.

Third, the current study also provides an empirical investigation of the socio-psychological outcomes (e.g., subjective well-being) of sports tourism in Jeju Island. We must emphasize the role of sports tourism marketing as a key factor in enhancing tourists' subjective well-being by satisfying their needs (Theodorakis et al., 2015).

5.2 Managerial Implications

The main managerial implication of this study is that tourism organizations, particularly DMOs, in Jeju Island must provide high-quality services to attract more Chinese tourists. Highly-perceived quality of services helps foster greater tourist satisfaction, which improves tourist behavioral intentions and subjective well-being.

On the other hand, Chinese tourists' travel behaviors and lifestyle are rapidly changing, particularly among the younger generation (Lee et al., 2011). Having a thorough understanding of the culture of Chinese tourists and grasping new trends in this population are essential for encouraging more Chinese tourists to visit Jeju Island (Lee, 2015). One of the best ways to do this would be to highlight Jeju Island's unique cultures, such as Korean wave (Hallyu) culture (Zeng, Chiu, Lee, Kang, & Park, 2015). Not only does Hallyu culture influence many Asian countries, including China, but it is also a crucial tool for attracting potential tourists and enhancing the local image (Kim, Lee, & Chon, 2010). Recent Internet technologies are playing an essential role in Chinese outbound tourism (Huang, Keating, Kriz, & Heung, 2015). We recommend DMOs incorporate mobile applications (e.g., WeChat) into sports tourism marketing in Jeju Island.

6. Limitations and Suggestions

This study has limitations. The first limitation is its unique focus on actual trip behaviors and its distinction of sports tourists from other tourists. While this group might include regular visitors, classified as sports tourists in this study, they may not have participated in sports activities (e.g., hiking) with the goal of doing sports. Second, this study investigated the perceptions of Chinese sports tourists generically, without considering differences between those on package tours and independent tourists. The two travel modes had different characteristics (Becken and Gnoth, 2004; Vainikka, 2014), which may have led to different perceptions among the tourists. Third, previous studies showed the difficulty of defining tourist satisfaction in outdoor leisure services, because tourists may be satisfied with the service in sports programs but not with their participation experience (Alexandris et al., 2004; Chan et al., 2015). Therefore, a deeper exploration of tourist satisfaction in the sports tourism context is needed in future research.

Acknowledgement

This research was modified from the Master's thesis of Shiheng Zeng.

References

- Alexandris, K., Dimitriadis, N., & Kasiara, A. (2001). The behavioural consequences of perceived service quality: An exploratory study in the context of private fitness clubs in Greece. *European Sport Management Quarterly*, 1(4), 280-299. <http://dx.doi.org/10.1080/16184740108721903>
- Alexandris, K., Zahariadis, P., Tsozbatzoudis, C., & Grouios, G. (2004). An empirical investigation into the role of the outcome dimension in measuring perceived service quality in a health club context. *International Journal of Sport Management*, 5(3), 281-294.
- All about Jeju Island. (2014). Jeju bus route.
- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. (1993). A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions. *Journal of marketing research*. <https://doi.org/10.2307/3172510>
- Brady, M. K., & Cronin Jr, J. J. (2001). Some new thoughts on conceptualizing perceived service quality: a hierarchical approach. *Journal of marketing*, 65(3), 34-49. <https://doi.org/10.1509/jmkg.65.3.34.18334>
- Brady, M. K., Voorhees, C. M., Cronin Jr, J. J., & Bourdeau, B. L. (2006). The good guys don't always win: the effect of valence on service perceptions and consequences. *Journal of Services Marketing*, 20(2), 83-91. <https://doi.org/10.1108/08876040610657011>
- Brajša-Žganec, A., Merkaš, M., & Šverko, I. (2011). Quality of life and leisure activities: How do leisure activities contribute to subjective well-being? *Social Indicators Research*, 102(1), 81-91. <https://doi.org/10.1007/s11205-010-9724-2>
- Chan, A., Hsu, C. H., & Baum, T. (2015). The Impact of Tour Service Performance on Tourist Satisfaction and Behavioral Intentions: A Study of Chinese Tourists in Hong Kong. *Journal of Travel & Tourism Marketing*, 32(1-2), 18-33. <https://doi.org/10.1080/10548408.2014.986010>

- Chen, C. F., & Chen, F.-S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*, 31(1), 29-35. <https://doi.org/10.1016/j.tourman.2009.02.008>
- Chen, C. F., & Tsai, M.-H. (2008). Perceived value, satisfaction, and loyalty of TV travel product shopping: Involvement as a moderator. *Tourism Management*, 29(6), 1166-1171. <https://doi.org/10.1016/j.tourman.2008.02.019>
- Clemes, M. D., Brush, G. J., & Collins, M. J. (2011). Analysing the professional sport experience: A hierarchical approach. *Sport Management Review*, 14(4), 370-388. <https://doi.org/10.1016/j.smr.2010.12.004>
- Cole, S. T., & Scott, D. (2004). Examining the mediating role of experience quality in a model of tourist experiences. *Journal of Travel & Tourism Marketing*, 16(1), 79-90. https://doi.org/10.1300/J073v16n01_08
- Cronin Jr, J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality. *the Journal of Marketing*, 125-131.
- Dann, G. M. (2012). Tourist motivation and quality-of-life: In search of the missing link *Handbook of Tourism and Quality-of-Life Research* (pp. 233-250): Springer. https://doi.org/10.1007/978-94-007-2288-0_13
- Deiner, E., Suh, E., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of economic psychology*, 29(1), 94-122. <https://doi.org/10.1016/j.joep.2007.09.001>
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *The Journal of Marketing*, 7-18. <https://doi.org/10.2307/1251898>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50. <https://doi.org/10.2307/3151312>
- Frijters, P., Johnston, D. W., & Shields, M. A. (2008). Happiness dynamics with quarterly life event data.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6): Pearson Prentice Hall Upper Saddle River, NJ.
- Higham, J. E. (2005). *Sport tourism destinations: Issues, opportunities and analysis*. Routledge.
- Hsu, C. H., Kang, S. K., & Lam, T. (2006). Reference group influences among Chinese travelers. *Journal of Travel Research*, 44(4), 474-484. <https://doi.org/10.1177/0047287505282951>
- Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Huang, S., Keating, B. W., Kriz, A., & Heung, V. (2015). Chinese Outbound Tourism: an Epilogue. *Journal of Travel & Tourism Marketing*, 32(1-2), 153-159. <https://doi.org/10.1080/10548408.2014.986018>
- Hutchinson, J., Lai, F., & Wang, Y. (2009). Understanding the relationships of quality, value, equity, satisfaction, and behavioral intentions among golf travelers. *Tourism Management*, 30(2), 298-308. <https://doi.org/10.1016/j.tourman.2008.07.010>
- Jeju Special Self-Governing Provincial Tourism Association. (2015). Travel - Leisure Sports. Retrieved from http://english.jeju.go.kr/index.php/contents/Tour/MasterpieceJeju/experience_tour/leisure_sports_tour
- Jeju Tourism Organization. (2015). *Tourism Statistics*. Retrieved from https://www.ijto.or.kr/korean/Bd/view.php?btable=pds&bno=108&pds_skin=&p=1&lcate=3
- Kelley, S. W., & Turley, L. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research*, 54(2), 161-166. [https://doi.org/10.1016/S0148-2963\(99\)00084-3](https://doi.org/10.1016/S0148-2963(99)00084-3)
- Kim, S. S., Lee, H., & Chon, K.-S. K. (2010). Segmentation of different types of Hallyu tourists using a multinomial model and its marketing implications. *Journal of Hospitality & Tourism Research*. <https://doi.org/10.1177/1096348009350646>
- Kline, R. B., & Santor, D. A. (1999). Principles & Practice of Structural Equation Modelling. *Canadian Psychology*, 40(4), 381. <https://doi.org/10.1037/h0092500>
- Kouthouris, C., & Alexandris, K. (2005). Can service quality predict customer satisfaction and behavioral

- intentions in the sport tourism industry? An application of the SERVQUAL model in an outdoors setting. *Journal of Sport & Tourism*, 10(2), 101-111. <https://doi.org/10.1080/14775080500223165>
- Lee, S., Jeon, S., & Kim, D. (2011). The impact of tour quality and tourist satisfaction on tourist loyalty: The case of Chinese tourists in Korea. *Tourism Management*, 32(5), 1115-1124. <https://doi.org/10.1016/j.tourman.2010.09.016>
- Lee, W. K. (2015). Articles: Attracting more Chinese Tourists for Korean Tourism Industry: Understanding the Culture of Chinese Consumers. *International Journal of Tourism and Hospitality Research*, 29(4), 77-90.
- Lemon, B. W., Bengtson, V. L., & Peterson, J. A. (1972). An exploration of the activity theory of aging: activity types and life satisfaction among in-movers to a retirement community. *Journal of gerontology*(27), 511-523. <https://doi.org/10.1093/geronj/27.4.511>
- Leung, L., & Lee, P. S. (2005). Multiple determinants of life quality: the roles of Internet activities, use of new media, social support, and leisure activities. *Telematics and Informatics*, 22(3), 161-180. <https://doi.org/10.1016/j.tele.2004.04.003>
- McCabe, S., & Johnson, S. (2013). The happiness factor in tourism: Subjective well-being and social tourism. *Annals of Tourism Research*, 41, 42-65. <https://doi.org/10.1016/j.annals.2012.12.001>
- Meng, F., Tepanon, Y., & Uysal, M. (2008). Measuring tourist satisfaction by attribute and motivation: The case of a nature-based resort. *Journal of Vacation Marketing*, 14(1), 41-56. <https://doi.org/10.1177/1356766707084218>
- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological science*, 6(1), 10-19. <https://doi.org/10.1111/j.1467-9280.1995.tb00298.x>
- Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for Sale: Do Experiential Purchases Make Consumers Happier than Material. *Journal of consumer research*, 36(2), 188-198. <https://doi.org/10.1086/597049>
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 460-469. <https://doi.org/10.2307/3150499>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *the Journal of Marketing*, 41-50. <https://doi.org/10.2307/1251430>
- Rust, R. T., & Oliver, R. L. (1993). *Service quality: New directions in theory and practice*: Sage Publications.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52(1), 141-166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Shonk, D. J., & Chelladurai, P. (2008). Service quality, satisfaction, and intent to return in event sport tourism. *Journal of sport management*, 22(5), 587-602. <https://doi.org/10.1123/jsm.22.5.587>
- Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of retailing*, 72(2), 201-214. [https://doi.org/10.1016/S0022-4359\(96\)90014-7](https://doi.org/10.1016/S0022-4359(96)90014-7)
- Standeven, J., & Knop, P. d. (1998). *Sport tourism*: Human Kinetics Publishers.
- Theodorakis, N., Kambitsis, C., & Laios, A. (2001). Relationship between measures of service quality and satisfaction of spectators in professional sports. *Managing Service Quality: An International Journal*, 11(6), 431-438. <https://doi.org/10.1108/09604520110410638>
- Theodorakis, N. D., Kaplanidou, K., & Karabaxoglou, I. (2015). Effect of Event Service Quality and Satisfaction on Happiness Among Runners of a Recurring Sport Event. *Leisure Sciences*, 37(1), 87-107. <https://doi.org/10.1080/01490400.2014.938846>
- Theodorakis, N. D., Tsigilis, N., & Alexandris, K. (2009). The mediating role of place attachment on the relationship between service quality and loyalty in the context of skiing. *International Journal of Sport Management and Marketing*, 6(3), 277-291. <https://doi.org/10.1504/IJSM.2009.029089>
- Thwaites, D. (1999). Closing the gaps: service quality in sport tourism. *Journal of Services Marketing*, 13(6), 500-516. <https://doi.org/10.1108/08876049910298766>
- Thwaites, D., & Chadwick, S. (2005). Service quality perspectives in sport tourism. *Sport in Society*, 8(2), 321-337. <https://doi.org/10.1080/17430430500087781>

- Tsitskari, E., Tsiotras, D., & Tsiotras, G. (2006). Measuring service quality in sport services. *Total Quality Management & Business Excellence*, 17(5), 623-631. <https://doi.org/10.1080/14783360600588190>
- Vuillemin, A., Boini, S., Bertrais, S., Tessier, S., Oppert, J.-M., Herberg, S., . . . Briançon, S. (2005). Leisure time physical activity and health-related quality of life. *Preventive medicine*, 41(2), 562-569. <https://doi.org/10.1016/j.ypmed.2005.01.006>
- Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338-361. <https://doi.org/10.1123/jism.24.3.338>
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2006). Services marketing: Integrating customer focus across the firm.
- Zeng, S., Chiu, W., Lee, C. W., Kang, H.-W., & Park, C. (2015). South Korea's Destination Image: Comparing Perceptions of Film and Nonfilm Chinese Tourists. *Social Behavior and Personality: an international journal*, 43(9), 1453-1462. <https://doi.org/10.2224/sbp.2015.43.9.1453>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Effect of Prevalent Supervisory Styles on Teaching Performance in Kuwaiti High Schools

Sultan G. Aldaihani¹

¹ Department of Administration and Planning, College of Education, Kuwait University, Keifan, Kuwait

Correspondence: Sultan G. Aldaihani, Department of Administration and Planning, College of Education, Kuwait University, PO Box 13281, Keifan, 71953, Kuwait. Tel: 965-6614-4332. Fax: 96-52-4483-8035. E-mail: dr.aldaihani@gmail.com

Received: December 2, 2016

Accepted: January 4, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p25

URL: <https://doi.org/10.5539/ass.v13n4p25>

Abstract

Purpose: This study sought to identify the importance of supervision in Kuwaiti high schools from the viewpoints of heads of departments and school teachers, as well as identifying the gap between ideal and prevalent supervisory styles in Kuwaiti high schools and determining the effects of supervision on teachers' professional performance. *Methodology:* The researcher took a qualitative approach, using structured interviews with a study sample represented by six heads of departments and six teachers from two high schools in Kuwait. *Findings:* It was found that supervision as a tool for continuous improvement in the school system positively affected the school climate. There was a gap between actual and ideal supervisory styles in the schools studied. Supervision had a positive effect on the professional performance of teachers; supervisors' notes and observations helped teachers in identifying their shortcomings and modifying their behavior accordingly. Challenges to the effective implementation of supervision in high schools included unsuitable supervisory practices, loss of connection between the teacher and the supervisor, teacher resistance to support, and lack of meaningful feedback. *Recommendations:* It is necessary to employ advanced supervisory styles in order to cope with the changes in the surrounding environment. Further study will help to determine the effect of supervision on the relationship between teachers and students.

Keywords: Kuwait, supervisory practices, instructional leadership, school reform, leadership preparation

1. Introduction

Teachers are the cornerstones of any educational system. In order to enable them to perform their roles, we must provide them with ample opportunity for growth and professional development. Supervision has become an essential part of the teaching profession. All educational institutions nowadays depend greatly on supervision in order to improve the instructional practices undertaken by teachers at different educational levels. Supervision can contribute significantly to the professional development of teachers by identifying their strengths and weakness.

The supervisor assumes many roles in the educational process, the most important one being that of an informative and critical consultant with the aim of improving educational outputs, helping to fulfill teachers' needs, and overcoming the various problems associated with classroom practices (Vieira, 2000). Among the many objectives of supervision in schools, the primary ones are improving the overall performance of the school and enhancing the quality of the educational process (Tesema, 2014).

Supervision can be regarded as one of the most influential factors in the quality of education, as it plays an important role in the improvement of teaching and learning by taking on the responsibility of professionally developing teachers and enhancing the academic achievement of students (Dickson, 2011).

For the supervision process to be more effective, supervisors must use appropriate strategies in the supervision of teachers in order to improve their teaching performance (Saani, 2013). Allowing for variation in supervisory styles is of great importance, as it affects the supervisees' satisfaction with the overall process. Fernando and Hulse-Killacky (2005) confirmed the correlation between supervisory styles and prediction of satisfaction with supervision as well as perceived self-efficacy of those under supervision. This study attempts to shed light on identification of different supervisory styles used by supervisors overseeing teachers in Kuwaiti high schools and

their relative effects on professional development.

2. Overview

2.1 Statement of the Problem

The statement of the problem revolves around identifying the prevalent supervisory styles in Kuwaiti high schools and how they affect teachers professionally. Secondary schools in many countries suffer from the challenges related to academic achievement of students (Alhajeri, 2011). Many schools acknowledge the importance of using different types of supervision as a method of improving the educational process as a whole (Wolfrom, 2009). The Ministry of Education in Kuwait has responsibility for supervising both public and private sectors, except for some schools subject to control and supervision of other countries (Al-Duwaila, 2012). Kuwait has six governorates, each having its own educational district and supervisory and administrative staff (Mohammad, 2008). If we want to improve the learning outcomes and raise the quality of education, we must first delineate the different supervisory behaviors that take place in high schools in Kuwait and understand their effects on the school climate.

2.2 Significance of the Study

Few studies exist that aim to define common supervisory styles and identify their relationship with professional performance and development of teachers. By determining the most prevalent supervisory styles used in Kuwaiti high schools and their effects on the professional performance of teachers in Kuwait, the researcher hopes to enrich the literature regarding the most common supervisory practices in high schools in Kuwait and open the door to development of best practices in this area.

2.3 Research Questions

For the purposes of this study, several questions were posited:

1. How important is supervision of teachers?
2. What gap exists between ideal and prevalent styles of supervision in Kuwaiti high schools?
3. How does supervision affect teachers?
4. What difficulties do teachers encounter in their relationships with supervisors?

2.4 Objectives of the Study

The current study seeks to identify the perceived importance of supervision in Kuwaiti high schools from the viewpoints of both heads of departments and school teachers. It also aims at identifying existing differences between ideal and prevalent supervisory styles in Kuwaiti high schools and determining the effects of supervision on teachers' professional performance.

2.5. Limitations of the Study

Despite the generalizability of results the researcher seeks to achieve, this study has some limitations:

- **Human Limitations:** This study is limited to heads of departments and school teachers in high schools in Kuwait.
- **Subject Limitation:** This study is limited to a discussion of the prevalent supervisory styles in Kuwaiti high schools that affect teachers professionally.
- **Time Limitations:** This study is limited to the academic year 2015–2016.

2.6 Terms Used in the Study

2.6.1 Supervision

Ayodele and Oyewole (2012) have defined supervision as “an organized, democratic process involving the supervisor and the persons or groups of persons supervised, for the achievement of desired objectives” (p. 88).

2.6.2 Supervisory Style

Lamb (2009) has defined supervisory style as “the perception of the behaviors demonstrated by the administrators in the supervision hierarchy” (p. 139).

3. Literature Review

Teacher supervision has emerged as an approach to improvement in the effectiveness of teaching practices (Begum, 2008). In the preservice phase, supervising student teachers is important in preparing them for actual teaching practice (Ayodele & Oyewole, 2012). In a study by Thobega and Miller (2008), most student teachers

perceived value in an array of supervisory models, but found contextual and clinical supervision most helpful.

In the in-service phase, supervision is of utmost importance as it can help, stimulate, guide, and encourage growth among teachers in their efforts to improve the quality of the teaching process (Okorji & Ogbo, 2013). Supervision helps in supporting the teaching process, assisting teachers to learn from each other, improving teacher utilization of available educational resources, and providing real opportunities for continuous evaluation and appropriate feedback (Regassa, Lemariam, Ferede, Hunde, & Lemma, 2013).

Dickson (2011) states that supervision aims at improving the teaching and learning processes, creating a favorable atmosphere for learning, achieving synergy and coordination of efforts in a way that improves the educational outcomes, ensuring professional development of teachers, enhancing teachers' motivation, enhancing of teaching and learning quality, identifying good as well as bad traits in a teacher's practice, helping less-competent teachers to become more competent, and supporting new teachers in adapting to the school environment. The supervisor is responsible for helping teachers in selecting what goals and objectives will be implemented in the teaching process, which in fact plays an important role in motivating students and managing the classroom environment with the aim of improving the learning atmosphere (Tesema, 2014).

Traditional supervisory methods have a number of shortcomings. Typically, such methods involve a one-way direction, whereby the supervisor talks and the teacher listens. Supervision has depended on provision of notes and suggestions following lesson delivery. Suggestions given by educational supervisors represent an expression of their own viewpoints based on their observations of teachers in the classroom without input from teachers regarding the challenges they face in their daily practices with students. This type of supervision usually depends on mentoring and attempting to correct the areas of shortcomings in teachers' performance without mentioning or reinforcing areas of excellence (Dickson, 2011).

The ineffectiveness of traditional models of supervision has been demonstrated by many researchers who have found that these traditional methods cause a state of dissatisfaction among teachers. Often, the primary roles of such models have been control and inspection with limited or no intention of enhancing teachers' professional development (Wong, 2004). The traditional model was based on three rigid stages: classroom observation, scoring of lesson delivery, and writing of a report based on observation. The supervisor tended to record all the teacher's errors and shortcomings, with less emphasis on strengths (Okorji & Ogbo, 2013).

Many factors may affect the quality of the supervision process; among these are the styles employed by the supervisor in the supervision process, which play pivotal roles in influencing the results of the supervision process (Fernando, 2003; Tanaka, 2009). Al Nazer and Mohammad (2013) revealed a statistically significant relationship between supervisors' styles and attitudes of high basic stage (middle school) teachers toward the profession. Alhajeri (2011) found a significant correlation between supervisory behaviors and school climate.

In response to the defects in the traditional style of supervision, educational researchers, school psychologists, and counselors have presented other advanced styles supervisors can adopt in order to improve the quality of the supervision process and positively affect its different outcomes (Ladany, Waljer, & Melincoff, 2001).

Fernando (2003) compared the characteristics of three different styles of supervision: attractive, interpersonally sensitive, and task oriented. Supervisors who adopt an attractive supervisory style are characterized by flexibility, friendliness, and supportiveness. With the interpersonally sensitive style, supervisors show more investment and perceptiveness. Finally, task-oriented supervisors are more structured, purposeful, and pragmatic (Wilson, 2014). Wong (2004) showed that the most-utilized and popular supervisory style was attractive or nondirective supervision. The attractive supervisory style is best suited for supervisors who prefer a cooperative approach but don't have the time to invest in more demanding styles such as interpersonally sensitive supervision (Wong, 2004). Li (2008) found an association between task-oriented supervisory styles and perception of control over or ownership of a job.

The clinical supervision model is another prominent model applied to the supervision process; it depends on distinct phases: pre-conference, observation, data collection, data analysis, and reflection (see Figure 1). This model is based on effective interaction between the teacher and the supervisor in order provide teachers with feedback that is helpful in improving teachers' professional development and growth (Baltaci-Goktalay et al., 2014; Kaneko-Marques, 2015). Robinson (2000) showed that a clinical supervision style had a positive effect on the school overall performance as well as teachers' job satisfaction.

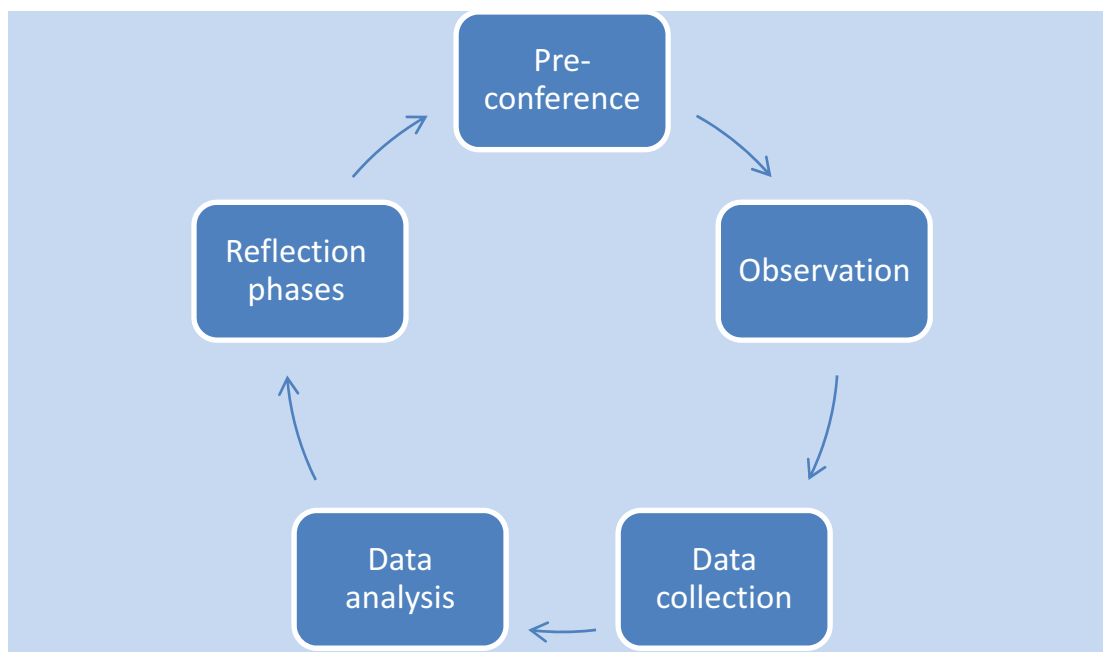


Figure 1. Clinical supervision model

Self-directed supervision is a kind of supervision in which the teachers take responsibility for their own professional development. This type of supervision is especially effective for teachers who like to work alone or have logistical or other hindrances to working with other teachers (Tesema, 2014). Self-directed supervision is based on the premise that the educational context is continually changing and teachers need to adapt to their current environment (Tesfaw & Hofman, 2012). Similarly, in consultancy supervision, the supervisees take the responsibility for the supervision process by consulting with their supervisors as needed regarding best practices (Briggs, 2010).

Inquiry-based supervision comprises a kind of action research whereby individual teachers or teams of teachers collaborate to solve certain problems (Tesema, 2014). Human-relations supervision places an emphasis on engendering satisfaction in teachers by showing interest in them as people, with the assumption that satisfied teachers will be more productive and more open to leadership and control (Ndebele, 2013).

Sharma, Yusoff, Kannan, and Baba (2011) showed that effective and meaningful supervision depends on involving all stakeholders (e.g., teachers, principals, subject teachers, subject specialists) in the supervision process. To ensure consistent professional growth and development of teachers, supervision must be continuous. Ayodele and Oyewole (2012) revealed that to achieve sustainable development, supervisors must concentration on quality assurance.

Despite the fact that teachers understand the importance of supervision for their professional development, they are sometimes reluctant to ask their supervisors for help or additional support, which negatively affects their professional growth (Kutsyuruba, 2003). In contrast to results found by other investigators, Ndebele (2013) found that supervision lacked relevance to instructional improvement. In surveys, teachers often felt that the supervision offered lacked meaningful feedback, which could indeed relate to the use of irrelevant supervisory practices. Some educational supervisors may tend to visit the educational setting only during the final period of academic study, which doesn't reflect the real picture of teachers' performance (Ayodele & Oyewole, 2012).

Sharma et al. (2011) found that instructional supervision directed to teachers wasn't effective as it didn't help in developing a sense of ownership or professional skills of teachers, but instead concentrated on punishing, insulting, or demoralizing teachers. Moradi, Sephefar, and Khadiv (2014) stated that teachers felt that they weren't being sufficiently challenged, and that the observation and feedback were only superficial. Regassa et al. (2013) concluded that problems arising with supervision stemmed from oversimplification of supervision roles by administrative offices, unwillingness of teachers to view supervisors' comments in a positive light, lack of supervisor skill in providing objective feedback, and insufficient cooperation from education offices.

Fritz and Miller (2003) stress the importance of a teacher-directed approach in supervision as an aid to

improving outcomes by allowing adaptations consistent with the changing environment. Roffman (2007) concluded that the best models of supervision are based on reinforcement of strengths, finding such models to be stronger predictors of positive supervision outcomes than constructive focus on deficits.

3.1 Previous Studies

Mandell (2006) took the principal's perspective in investigating the effect of supervision on teachers' professional growth. The study sample consisted of 10 high school principals in western Pennsylvania. The study used descriptive analysis methodology and depended on a semistructured, open-ended interview format comprising 11 questions. The principals interviewed felt that supervision could affect a teacher's professional growth, but the degree of impact was dependent on the supervision model employed. The schools in this study employed two supervisory models: walkthrough and differentiated. The walkthrough model consists of observations made during short, unscheduled visits to the classroom. The differentiated model requires that the teacher select what they will be evaluated on and how they will be evaluated. Most principals in this study felt that the walkthrough model was the most effective method of helping teachers focus on instruction and improve their skills, their major consideration being the amount of time required to pursue this model effectively. The study recommended that supervision procedures and practices respect the individual differences in teachers and acknowledge the complex nature of teaching.

Erbilgin (2008) investigated an educative supervisory style, in which supervisors use open-ended questioning in conjunction with discussion of specific incidents, used by mathematics teachers in supervising student teachers. The sample used in the study consisted of three cooperating teachers and their three student teachers at a university in the southern United States. The study methodology employed mixed methods (descriptive analysis and experimental) and employed interviews, surveys of the teachers' beliefs about supervision and reflections on the program, online discussions, face-to-face meetings, observations of lessons, and post-lesson conferences as study tools. The study concluded that the program provided the supervisors with opportunities to gain new knowledge, reexamine their current beliefs, and reflect on their supervisory practices. Educative supervision places student teachers in the role of active constructors of their knowledge about teaching. The percent of talking originating with the student teachers in the post-lesson conferences increased after elucidation of the educative supervisory style being employed in the program. The study recommended that future programs provide supervisors with the opportunity to practice and discuss different types of questions, communications, and suggestions that could be employed from an educative supervision perspective.

Thobega and Miller (2008) aimed at describing student teachers' perceptions and preferences regarding the supervisory styles they experienced in working with supervisors and cooperating teachers. The study sample consisted of 72 university-level agricultural education student teachers in the United States. The study used descriptive analysis methodology and depended on a three-section questionnaire as the tool for the study. The researchers concluded that student teachers perceived that both their teachers and supervisors engaged in contextual and clinical supervision practices. Teachers generally preferred a nondirective style of developmental supervision, while supervisors tended to take a collaborative approach. Most student teachers felt that all supervision models had value, with contextual and clinical supervision being most effective. As a whole, the student teachers preferred a collaborative supervision style. The researchers recommended further study to investigate the influence of supervisor beliefs, supervisory situations, and student teachers' personal and professional characteristics on supervisory behaviors.

Khawaldeh, Al-Omari, and Al-Majali (2012) investigated supervisory beliefs of educational supervisors in the Directorate of Education in Jerash, Jordan. The study sample consisted of 24 educational supervisors in the Jerash Directorate of Education. The study used descriptive analysis methodology and employed a 40-paragraph beliefs reveal scale as the tool for the study. The study concluded that only 16.6% of supervisors were aware of their supervisory beliefs, while 83.4% of them weren't. The supervisors didn't have the necessary skills to be completely aware of their supervisory beliefs and the contradiction between belief and practice. The study recommended that supervisors be subject to training to be aware of their beliefs and to have the ability to examine them as well as the ability to analyze of the difference between perceived and actual beliefs.

Baffour-Awuah (2011) aimed to elucidate the practice of instructional supervision by examining teachers' and head teachers' concepts, perspectives, and experience with instructional supervision. The study sample consisted of 250 teachers, 50 head teachers, and 2 administrator in Ghana. The study used a mixed-method approach (descriptive analysis methodology) and employed a questionnaire, interviews, and analysis of the Ghana Education Service policy document on supervision as tools for the study. The study concluded that the policy document on instructional supervision, which emphasizes aspects of instructional supervision related to

monitoring teaching activities and ensuring maximum use of instructional time, may have a negative impact on instructional supervision. Teachers and head teachers in this study primarily employed traditional instructional supervision practices. While the participants were for the most part satisfied with these traditional practices, they also considered that more contemporary approaches to instructional supervision should be instituted. The study recommended revision of the policy document in consultation with teachers to include more contemporary practices and including sustainable teacher and supervisor training programs in the educational budget.

Dodd (2006) investigated the differences between eastern Pennsylvania special-education administrators' perceptions of their supervisory behaviors and special-education teachers' perceptions of actual and preferred supervisory behaviors. The study sample consisted of 364 individuals (195 supervisors and 169 teachers), distributed into three groups according to experience level (1–3 years, 4–10 years, and 11+ years). The study used a descriptive comparative approach, using an electronic questionnaire to elicit teachers' and supervisors' perceptions. Dodd found that teachers with 1 to 3 years of experience preferred collaborative supervision to either directive or nondirective supervision, and teachers with 4 to 10 years of experience preferred directive supervision over nondirective or collaborative supervision; teachers with more than 10 years of experience did not differ significantly from the other two groups. Dodd concluded that experience level contributed to the mode of supervision that the teachers preferred and that was provided by their supervisors. The study recommended developing effective and efficient instruments for measuring the situational supervision model and determining if special-education teachers and supervisors had different educational needs regarding situational supervision.

Paulsen (2011) determined agriculture teachers' perceptions regarding selected instructional supervisory practices perceived to be used in supervising the performance of agriculture teachers in nonformal educational settings. The study sample comprised 234 teachers from 17 states. The study used a cross-sectional survey design with electronic questionnaires. Paulsen concluded that the general beliefs and perceptions of agricultural-education teachers toward instructional supervision did not vary significantly by age or highest degree attained. Female agricultural-education teachers embraced the importance of instructional supervision more than male teachers, as did more-experienced teachers. The study recommended that agricultural-education teachers "reinvigorate" supervised agricultural experience and formulate strategies, activities, and outcomes. It also recommended surveying principals regarding their general beliefs and perceptions regarding supervision and the importance of instructional supervisory practices.

3.2 Comparison of Previous Studies and the Current Study

The objective of the current study is partially consistent with Mandell (2006), who sought to determine how supervision affects teachers' professional growth; Erbilgin (2008), who aimed at understanding the ways in which a supervision program supported knowledge and practices of supervisors; Thobega and Miller (2008), who examined student teachers' perceptions and preferences regarding the type of supervision they received; and Dodd (2006), who investigated the differences between special-education supervisors' and teachers' perceptions of actual and preferred supervisory behaviors. The current study is not consistent with Khawaldeh et al. (2012), who strived to determine the awareness of supervisory beliefs in educational supervisors and Paulsen (2011), who sought to determine agriculture teachers' perceptions regarding selected instructional supervisory practices in nonformal educational settings.

The sample in this study is not consistent with any of the previous studies described, as the sample for the current study consists of heads of departments and schoolteachers, while Paulsen (2011) studied teachers; Dodd (2006) and Erbilgin (2008) studied teachers and supervisors; Baffour-Awuah (2011) studied teachers, head teachers, and administrators; Khawaldeh et al. (2012) studied supervisors; Thobega and Miller (2008) studied student teachers; and Mandell (2006) studied school principals.

The methodology of the study is not consistent with the methodology employed in the previous studies as the current study depended on qualitative methodology, while Mandell (2006), Baffour-Awuah (2011), and Khawaldeh et al. (2012) used descriptive analytic methodology; Dodd (2006) used a descriptive comparative approach; and Paulsen (2011) used a cross-sectional survey design. The study tool of the current study, interviews, is consistent with Mandell (2006), but inconsistent with Paulsen (2011) and Dodd (2006), who used electronic questionnaires; Baffour-Awuah (2011), who used a questionnaire, interviews, and document analysis; and Erbilgin (2008), who used interviews and surveys.

This researcher has benefited from previous studies in more than one area:

- reviewing the literature and documenting the references used in the study
- supporting the literature with results of researches and studies on the topic

- building the statement of the problem through reviewing relevant studies
- determining the methodology and instruments of the study
- identifying appropriate statistical methods
- selecting the method to use in deducing the results of the study through analyzing the results and identifying areas of similarity and difference

4. Study Methodology and Sample

The researcher depended on a qualitative approach as the methodology of the study, using interviews with the study sample as represented by six male and female heads of departments and six male and female teachers from two high schools in Kuwait in order to identify viewpoints regarding the prevalent supervisory styles in Kuwaiti high schools that affect teachers professionally. Structured interviews were employed to take a closer look at the actual reality of supervisory styles used in the Kuwait high school setting. The interviews revolved around four main questions:

1. From your viewpoint, is supervision considered an important issue in the school system?
2. Do you think that there is a difference between ideal and prevalent supervisory styles in Kuwaiti high schools?
3. Do you think that supervision has a positive effect on the professional performance of teachers?
4. In your actual experience, what different challenges can hinder the effective implementation of teacher supervision in school settings?

5. Results of Interviews

5.1 Question 1 Responses

The first interview question (*From your viewpoint, is supervision considered an important issue in the school system?*) attempted to identify the perceived importance of supervision in the school setting. Following are some of the responses. For purposes of identification, the study subjects are labeled Department Head A through D and Teacher 1 through 6.

5.1.1 Department Head A

“I think supervision is a basic element in all educational institutions. Its importance emerges from being a tool for continuous improvement in the school system. It positively affects the school climate.”

5.1.2 Department Head D

“Supervision is the only way for the improvement of the school system, as it can be used as a diagnostic instrument in order to identify areas of strengths and weakness in the school performance, and thus take the necessary procedures.”

5.1.3 Teacher 1

“Supervision is essential to my profession as a teacher. It can be regarded as a tool for continuous improvement and growth. The supervisor is responsible for identifying our needs and the needs of school principals and as a result give his opinion regarding the type and content of professional development programs.”

5.1.4 Teacher 6

“In my opinion, school supervision is one of the means for school improvement. It helps in mentoring the progress of all individuals in the school system. It can be regarded as a tool for quality assurance.”

5.2 Question 2 Responses

The second interview question (*Do you think that there is a difference between ideal and prevalent supervisory styles in Kuwaiti high schools?*) attempted to isolate the differences between ideal and actual supervisory styles employed. All the study participants agreed that there is a gap between the current and ideal supervisory styles. Following are some of the responses.

5.2.1 Department Head C

“I think there is a great gap between ideal and actual supervisory practices. For example, I usually prefer the clinical supervision style, but in-school supervision practiced by school principals and out-of-school supervision based on external supervisors from educational departments are a way from ideal practices.”

5.2.2 Department Head F

“We usually prefer self-directed supervision where we can take the responsibility of this process. I think we have knowledge and experience that can help us in doing this supervision independently, but in fact the supervisory practices are based on classroom visits only.”

5.2.3 Teacher 1

“I can say that the current supervision process suffers from many shortcomings, as the supervisor depends on one-way direction, without any discussion of the problems facing us in the classroom, so the practice isn’t effective. In my opinion, I think that clinical supervision will be an effective supervisory style through which the supervisor can determine our problems and direct us to the correct solution.”

5.2.4 Teacher 4

“I feel a shock when talking about what is already existing and what should be existing. The ideal supervision in my opinion must be built on cooperation between the supervisee and the supervisor, but the reality is contrary to what has been mentioned, as there is no space for dialog or discussion between the two parties. The relationship is based on a supervisor who always talks and a supervisee who always listens.”

5.3 Question 3 Responses

The third interview question (*Do you think that supervision has a positive effect on the professional performance of teachers?*) explored the different effects of supervision on the professional performance of teachers. All the study participants agreed that supervision has a positive effect on teachers’ performance. Following are some of the responses.

5.3.1 Department Head B

“Supervision is one of the influential factors that does affect the professional performance of teachers. Through supervisors’ notes and observations, the teacher can identify his shortcomings and modify his behavior accordingly.”

5.3.2 Department Head E

“We can consider supervision as a method of professional development through which the teacher can get information on the advanced teaching styles, how he can control the classroom environment and deal with students, how to prepare the lesson and present it in an attractive way, and finally help teachers in making the teaching process more meaningful.”

5.3.3 Teacher 2

“No one can deny the importance of supervision to our professional performance. If the supervisor uses the suitable supervisory style, then our performance will be improved, as the appropriate supervisory style will help in fulfilling our needs and expectations. It can guide us towards the kind of professional programs we need.”

5.3.4 Teacher 5

“I think that the supervision process is very important for me, as it helps me to promote my teaching and behavior skills. It also provides me with the techniques through which I can improve my experiences.”

5.4 Question 4 Responses

The fourth interview question (*In your actual experience, what different challenges can hinder the effective implementation of teacher supervision in school settings?*) focused on identifying the different stumbling blocks to the success of the supervision process. The responses of the study sample varied to some extent; following are some of the responses.

5.4.1 Department Head A

“There [are] many challenges that could affect the supervision process. Among these challenges are the use of unsuitable supervisory practices, loss of connection between the teacher and the supervisor, the unavailability of the supportive atmosphere that can help the two parties to do their best for the benefit of students. . . . I think the biggest challenge that can hinder the success of supervision can be represented in missing a common loop between supervisors and teachers. Also, the problem of teachers’ resistance to support can be a big challenge.”

5.4.2 Teacher 2

“The challenges that hinder the effective implementation of supervision are use of unsuitable of supervisory styles and the busy schedule of supervisors that doesn’t give them the time to make the supervision process more

meaningful.”

5.4.3 Teacher 3

“In my opinion, there are many challenges to effective supervision. These challenges are lack of meaningful feedback, the emphasis on errors and losing sight of strengths, and failure to engage teachers in the supervision process.”

6. Analysis of Results

6.1 Question 1

The study sample offered varied responses to Question 1 (*From your viewpoint, is supervision considered an important issue in the school system?*), but all in all, the responses confirmed that supervision is a basic element in all educational institutions. It is a tool for continuous improvement in the school system and positively affects the school climate. These results align with the conclusions drawn by Alhajeri (2011), who found significant correlation between supervisory behaviors and school climate. In addition, Tesema (2014) showed that supervision helps in improving the overall performance of a school and enhancing the quality of the educational process. As supervision can also function as a diagnostic instrument in identifying areas of strength and weakness in the school performance and helps in monitoring the progress of all individuals in the school system, it can be regarded as a quality-assurance tool.

6.2 Question 2

In responding to Question 2 (*Do you think that there is a difference between ideal and prevalent supervisory styles in Kuwaiti high schools?*) all the study participants agreed that there is a gap between actual and ideal supervisory styles in Kuwaiti high schools. The general consensus was that both on-site supervision as practiced by school principals and external supervision by administrators from educational departments at remote sites are a ways from ideal practice. Current supervisory practices are based on traditional approaches such as classroom visits. There is no space for dialog or discussion between the two parties; the relationship is based on a supervisor who always talks and a supervisee who always listens. The study sample did agree that there are tendencies toward some advanced supervisory styles, such as clinical supervision, that help teachers to identify their strengths and weakness, but expressed a need for other forms of supervision that allow the teacher to have input on the supervision process (e.g., self-directed supervision). These results are in concurrence with Robinson (2000), who showed that the use of a clinical supervision style employing feedback had a positive effect on elementary school overall performance and teacher job satisfaction.

6.3 Question 3

In their responses to Question 3 (*Do you think that supervision has a positive effect on the professional performance of teachers?*) all the study participants responded that supervision has a positive effect on teacher professional performance. Through supervisors' notes and observations, teachers can identify their shortcomings and modify their behavior accordingly. Supervision can be considered a tool for professional development with which the teacher can obtain information on advanced teaching styles and develop expertise in controlling the classroom environment, dealing with students, and preparing lessons and presenting them in an attractive way. Participants felt that when a supervisor uses a suitable supervisory style, teacher performance is improved. Further, they considered that the appropriate supervisory style could help in guiding teachers into the kinds of professional programs they needed. These results are consistent with Mandell (2006), who confirmed that supervision positively affects teacher professional growth. Additionally, Erbilgin (2008) showed that a program implementing supervision in an educational setting supported the knowledge and practices of supervisors. Thobega and Miller (2008) found all supervision models to be important, with contextual and clinical supervision being most effective.

6.4 Question 4

Among the challenges cited by the study sample in responding to Question 4 (*In your actual experience, what different challenges can hinder the effective implementation of teacher supervision in school settings?*) were the use of unsuitable supervisory practices, loss of connection between the teacher and the supervisor, lack of a supportive atmosphere that could help the administrators and teachers to do their best for the benefit of students, teachers' resistance to support, lack of meaningful feedback, emphasis on errors and losing sight of strengths, and failure to engage teachers in the supervision process. Consistent with these results, Khawaldeh et al. (2012) found that supervisors often lack the skill set that would enable them to be completely aware of their supervisory beliefs, with a resulting contradiction between belief and practice. Also, Regassa et al. (2013) in studying supervision practices in secondary schools found a failure of close cooperation between administrative offices

and schools, lack of supervision skills in providing teachers with objective feedback, and low readiness of teachers to view positively the comments of supervisors.

6.5 Summary

In summary:

- Supervision is a tool for continuous improvement in the school system and positively affects the school climate.
- There is a gap between actual and ideal supervisory styles in Kuwaiti high schools in terms of both on-site supervision practiced by school principals and remote supervision by external supervisors. Current supervisory practices are based on traditional styles such as classroom visits, with no allowance made for a two-way interchange between the two parties, resulting in a relationship based on a supervisor who always talks and a supervisee who always listens.
- Supervision has a positive effect on teachers' professional performance. Through supervisor notes and observations, the teacher can identify shortcomings and modify behavior accordingly. Supervision can be utilized as a method of professional development through which the teacher can get information on advanced teaching styles and learn to control the classroom environment, deal with students, and prepare and present lessons in an attractive and effective way. With suitable supervisory styles, teacher performance can be significantly enhanced.
- Challenges typically hindering the effective implementation of supervision in high schools are unsuitable supervisory practices, loss of connection between the teacher and the supervisor, unavailability of a mutually supportive atmosphere that can help administrators and teachers to do their best for the benefit of students, teachers' resistance to support, lack of meaningful feedback, emphasis on errors and losing sight of strengths, and failure to engage teachers in the supervision process.

7. Recommendations and Suggestions

In the light of the results found in this study, the researcher has the following recommendations and suggestions:

- Emphasis must be placed on the importance of supervisory styles in the improvement of the educational outcomes.
- Advanced supervisory styles should be implemented to cope with the changing educational environment.
- School districts in Kuwait must work hard to provide effective training for supervisors in order to help them adopt suitable supervisory styles.
- The degree of cooperation between school teachers and supervisors in Kuwaiti high schools must be broadened.
- Further research and study should be carried out in order to investigate the effects of supervision on students' academic performance.
- The effect of supervision on the relationship between teachers and students should be determined by further study.
- The prevalent supervisory styles that affect teachers professionally at various educational levels should be identified.

References

- Al-Duwaila, A. (2012). *A comparative study between Kuwait's government and private sector primary schools in methods of teaching and pupils' achievement in mathematics* (Doctoral dissertation, Brunel University). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.426.2449&rep=rep1&type=pdf>
- Alhajeri, S. (2011). *Relationships between supervisory behaviors and school climate as perceived by secondary school teachers in the State of Kuwait* (Unpublished doctoral dissertation). Indiana State University, Indiana, United States.
- Al Nazer, M., & Mohammad, G. H. A-R. (2013). Supervising practices of education supervisors and their relationship with the attitudes of high basic stage teachers towards the profession in the Capital Amman Governorate from their point of view. *International Journal of Humanities and Social Science*, 3, 223–243.
- Ayodele, J. B., & Oyewole, B. K. (2012). Towards ensuring qualitative supervision of teaching practice in Nigerian universities for sustainable development. *OIDA International Journal of Sustainable Development*, 5(9), 87–94.

- Baffour-Awuah, P. (2011). *Supervision of instruction in public primary schools in Ghana: Teacher's and headteacher's perspectives* (Professional doctorate thesis, Murdoch University). Retrieved from <http://researchrepository.murdoch.edu.au/8483/>
- Baltaci-Goktalay, S., Kesner, J., Uzun, A., Bulunuz, N., Gürsoy, E., & Bulunuz, M. (2014). Redefining a teacher education program: Clinical supervision model and UludagKDM. *International Journal on New Trends in Education and Their Implications*, 5(2), 1–11.
- Begum, F. (2008). *Assistant principals and teacher supervision: Roles, responsibilities and regulations*. (Unpublished doctoral dissertation). University of Houston, Houston, Texas, United States.
- Briggs, D. (2010). *A qualitative study using interpretative phenomenological analysis to explore chartered counselling psychologists experiences of supervision* (Doctoral dissertation, University of Wolverhampton). Retrieved from <http://core.ac.uk/download/pdf/1933273.pdf>
- Dickson, A. (2011). *The state of supervision of teaching and learning in public junior high schools in Ghana: A case study of selected junior high schools in Sekyere East District of Ashanti Region* (Master's thesis, Kwame Nkrumah University of Science and Technology). Retrieved from <http://ir.knust.edu.gh/bitstream/123456789/4048/1/Final.pdf>
- Dodd, R. A. (2006). *Preferred supervisory practices of special education supervisors and special education teachers* (Unpublished doctoral dissertation). Marywood University, Pennsylvania, United States.
- Erbilgin, E. (2008). *Exploring a program for improving supervisory practices of mathematics cooperating teachers* (Doctoral dissertation, Florida State University). Retrieved from <http://diginole.lib.fsu.edu/cgi/viewcontent.cgi?article=1435&context=etd>
- Fernando, D. M. (2003). *The relationship of supervisory styles to satisfaction with supervision and self-efficacy of master's level counseling students* (Unpublished doctoral dissertation). University of New Orleans, Louisiana, United States.
- Fernando, D. M., & Hulse-Killacky, D. (2005). The relationship of supervisory styles to satisfaction with supervision and the perceived self-efficacy of master's-level counseling students. *Counselor Education and Supervision*, 44(4), 293–304. <https://doi.org/10.1002/j.1556-6978.2005.tb01757.x>
- Fritz, C., & Miller, G. (2003). Supervisory options for instructional leaders in education. *Journal of Leadership Education*, 2(2), 13–27. <https://doi.org/10.12806/V2/I2/RF2>
- Kaneko-Marques, S. M., & Mari, S. (2015). Reflective teacher supervision through videos of classroom teaching. *Profile*, 17(2), 63–79. <https://doi.org/10.15446/profile.v17n2.44393>
- Khawaldeh, A. A., Al-Omari, J. F., & Al-Majali, G. A. (2012). Awareness of the educational supervisors in Jordan to their supervisory beliefs (Educational supervisors in the Directorate Of Education in the Province Of Jerash) (Case Study). *European Scientific Journal*, 8(13), 47– 60.
- Kutsyuruba, B. (2003). *Instructional supervision: Perceptions of Canadian and Ukrainian beginning high-school teachers* (Master's thesis, University of Saskatchewan). Retrieved from <http://www.collectionscanada.gc.ca/obj/s4/f2/dsk3/SSU/TC-SSU-09052003134303.pdf>
- Ladany, N., Walker, J. A., & Melincoff, D. S. (2001). Supervisory style: Its relation to the supervisory working alliance and supervisor self-disclosure. *Counselor Education & Supervision*, 40(4), 263–265. <https://doi.org/10.1002/j.1556-6978.2001.tb01259.x>
- Lamb, R. M. (2009). *A social cognitive approach to collective psychological empowerment: An investigation of collective-efficacy and potency theory with technical college faculty* (Doctoral dissertation, University of Georgia). Retrieved from https://getd.libs.uga.edu/pdfs/lamb_raymond_m_200912_edd.pdf
- Li, T. (2008). *The relationship between leadership styles, perceived control and psychological ownership* (Master's thesis, University of Waikato). Retrieved from <http://researchcommons.waikato.ac.nz/bitstream/handle/10289/2469/thesis.pdf?sequence=1&isAllowed=y>
- Mandell, E. D. (2006). *Supervisory practices and their effect on teacher's professional growth* (Doctoral dissertation, University of Pittsburgh). Retrieved from <http://d-scholarship.pitt.edu/6716/1/MandellEdwardDissertationMarch2006.pdf>
- Mohammad, E. A. A. (2008). *The place of writing in first grade Kuwaiti English education: A sociological case study* (Doctoral dissertation, Queensland University of Technology). Retrieved from http://eprints.qut.edu.au/26369/1/Elham_Mohammad_Thesis.pdf

- Moradi, K., Sepehrifar, S., & Khadiv, T. P. (2014). Exploring Iranian EFL teachers' perceptions on supervision. *Proceedings of the International Conference on Current Trends in ELT*, 98, 1214–1223. <https://doi.org/10.1016/j.sbspro.2014.03.536>
- Ndebele, C. (2013). Prevalent supervisory styles in primary schools in a remote rural district in Zimbabwe: Strategies for reconciling them with teacher preferred supervisory styles. *Studies of Tribes and Tribals*, 11(1), 55–66.
- Okorji, P. N., & Ogbo, R. N. (2013). Effects of modified clinical supervision on teacher instructional performance. *Journal of Emerging Trends in Educational Research and Policy Studies*, 4, 901–905.
- Paulsen, T. H. (2011). *Supervisory practices in non-formal educational settings as perceived by agricultural education teachers: A national study* (Doctoral dissertation, Iowa State University). Retrieved from <http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=2992&context=etd>
- Regassa, T., Lemariam, T. T., Ferede, B., Hunde, A. B., & Lemma, A. (2013). An exploration of the utilization of supervision feedbacks: The case of some secondary schools in Jimma Zone. *Education*, 3, 309–318.
- Robinson, S. G. (2000). *Teacher job satisfaction and levels of clinical supervision in elementary schools* (Unpublished doctoral dissertation). University of Southern Mississippi, Mississippi, United States.
- Roffman, M. S. (2007). *Supervisee perceptions of supervisory focus on strengths and constructive focus on deficits: Development and validation of a measure* (Unpublished doctoral dissertation). University of Maryland, College Park, Maryland, United States.
- Saani, A-J. (2013). Influence of compensation and supervision on private basic school teachers work performance in Ashaiman Municipality. *International Journal of Business and Social Science*, 4(17), 64–69.
- Sharma, S., Yusoff, M., Kannan, S., & Baba, S. B. (2011). Concerns of teachers and principals on instructional supervision in three Asian countries. *International Journal of Social Science and Humanity*, 1(3), 214–217. <https://doi.org/10.7763/IJSSH.2011.V1.37>
- Tanaka, H. (2009). *The relationship between supervisors' power bases and supervisory styles* (Doctoral dissertation, University of New Orleans). Retrieved from <http://scholarworks.uno.edu/cgi/viewcontent.cgi?article=2006&context=td>
- Tesema, A. (2014). *The practices and challenges of school-based supervision in government secondary schools of Kamashi Zone of Benishangul Gumuz Regional State* (Master's thesis, Jimma University). Retrieved from <http://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/5492/ABEBE%20FINAL%20RESEARC%20H.pdf?sequence=1>
- Tesfaw, T. A., & Hofman, R. H. (2012). *Instructional supervision and its relationship with professional development: Perception of private and government secondary school teachers in Addis Ababa* (Master's thesis, University of Groningen). Retrieved from <http://files.eric.ed.gov/fulltext/ED534226.pdf>
- Thobega, M., & Miller, G. (2008). Perceptions of supervision practices by agricultural education student teachers. *Journal of Agricultural Education*, 49(3), 65–75. <https://doi.org/10.5032/jae.2008.03065>
- Vieira, F. (2000). The role of instructional supervision in the development of language pedagogy. *Mélanges CRAPEL*, 25, 31–40.
- Wilson, A. L. (2014). *Reflections on the supervision interactions of residence life staff: The implications of racial identity on the hall director (HD)/resident assistant (RA) supervisory relationship* (Doctoral dissertation, University of Texas at Austin). Retrieved from <https://repositories.lib.utexas.edu/bitstream/handle/2152/25229/WILSON-DISSERTATION-2014.pdf?sequence=1>
- Wolfram, D. H. (2009). *Promoting professional growth by meeting teacher needs: the walk-through as an approach to supervision* (Unpublished doctoral dissertation). University of Maine, Maine, United States.
- Wong, S. (2004). Pre-service teachers' perceptions of cooperative teachers' supervisory styles and satisfaction in Singapore. *Educational Research Journal*, 19(1), 63–91.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Aircraft Acquisition Conceptual Framework

Ismail bin Yusof¹ & Abd Rahman Abdul Rahim¹

¹ Razak School of Engineering and Advanced Technology, University Teknologi Malaysia, Kuala Lumpur, Malaysia

Correspondence: Ismail bin Yusof, Razak School of Engineering and Advanced Technology, University Teknologi Malaysia, Jalan Sultan Yahya Petra, 54100 Kuala Lumpur, Malaysia. Tel: 603-2180-5186. E-mail: ismail_yusof2005@yahoo.com

Received: December 11, 2016

Accepted: December 23, 2016

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p37

URL: <http://dx.doi.org/10.5539/ass.v13n4p37>

Abstract

The Royal Malaysian Air Force (RMAF) has faced difficulties in achieving and sustaining at least 70% of its aircraft availability (Av) in order to support its operational requirements. The head start for this research is to discuss with a focus group (FG) which comprise of eight officers and one moderator and supported by observation on the field. The FG highlighted that the low Av was due to the ineffectiveness and inefficiency of the through life cycle support (TLCS) as a result of weaknesses in the acquisition conceptual framework (ACF). Three research questions were put forward; Q1: Why has the RMAF not achieved its aircraft Av as its desired objectives? Q2: How do the RMAF's present acquisition practices given a significant impact to Av? And Q3: What is the recommended ACF to be used to ensure higher aircraft Av? The mix mode method (quantitative and qualitative) data collection was used. The literature review focused on critical success factors (CSFs) in terms of acquisition, terms and definition, and present practices in the Royal Malaysian Army (RMA), the Royal Malaysian Navy (RMN), the Malaysian public sector, the Department of Defence of the United States of America (DoD USA), the Ministry of Defence of United Kingdom (MoD UK) and the Australian Defence Force (ADF). Based on the CSFs from the literature review, a preliminary ACF I was developed. The RMAF case study had focused on Type A, Type B, Type C and Type D aircraft. Data on aircraft status for FY 2011 to 2015 was gathered from the Air Support Command Headquarters (ASHQ). The survey was achieved through 16 self-administered structured questionnaires which are close-ended involving 120 out of 150 respondents from the Worker Group (WG). The interviewer collected qualitative data using 21 semi-structured questionnaires with open-ended answers on 20 respondents from the Management Group (MG). The survey and interview results were presented in a matrix table and categorized in accordance with themes and their relationships. Based on the results of the case study, the preliminary ACF I was modified to ACF II. Then, ACF II was validated by four experts who comprise of two senior officers and two senior managers from the aviation industry. After validation, the ACF II was modified to ACF III (final) and was proposed for implementation. Three project objectives were put forward. Objective 1: To identify the cause of low Av. Finding 1: Av for Type A, Type B, and Type C aircraft for FY 2011 to 2015 is approximately 43% (target $\geq 70\%$ Av). The low Av is due to aircraft downtime waiting for spare parts at the RMAF's facilities (AWP) 23.5% (target $\leq 10\%$), waiting for spare parts at the second line or contractor facilities (CONT) 25% (targeted $\leq 10\%$), and under work by RMAF Technicians (IWRK) 9% (within target $\leq 10\%$). Objective 2: To identify the RMAF's present ACF and its significant impact to Av. Findings: 2: The weaknesses of CSF's integration in the present ACF which is based on an ad-hoc basis have caused ineffective and inefficient TLCS, higher AWP and CONT, and low Av as highlighted in the problem statement. Objective 3: To propose the ACF for aircraft acquisition. Finding 3: The effectiveness and efficiency of the ACF proposal requires a holistic integration of CSFs which consist of: integrated logistics support, life cycle cost calculation, ecosystem for public-private participation in defence industry, explicit acquisition management framework, regulations, policy and procedures, acquisition operational process, performance measure, competency, and good governance. This ACF ensures aircraft TLCS, low AWP, low CONT, and the achievement of Av as per the RMAF's desired objective. This study focuses on RMAF's military aircraft. Hence, application of the study results on civil aviation aircraft or other sectors might be limited and requires further research.

Keywords: Aircraft acquisition conceptual framework, critical success factors in aircraft acquisition.

1. Introduction

Military weapons systems have to achieve their optimum percentage of availability (Av) in order to fulfil the

need to defend any country. The RMAF’s vision is to be a dominant air power. This is in-line with its mission to defend the sovereignty and integrity of the nation and its interest through the effective use of military assets. Military operations range from war fighting, peace enforcement, evacuation programs, and peacekeeping to humanitarian tasks such as humanitarian assistance and disaster relief. Certain assets have yet to achieve the desired state of sustaining at least 70% availability (Av) (RMAF HQ, PU 2102, 2012) which is the main issue in this research. For example, an aircraft is considered available when it is ready to support the air force’s operational requirements. This research had started from a discussion with a focus group (Starr, 2014) which consists of eight senior officers led by a moderator (Salant & Dillman, 1994) and supported by observation of actual practices in the field (Starr, 2014; Abd Rahman Abdul Rahim & Baskh, 2003). The FG had highlighted that higher aircraft downtime and low aircraft Av were due to aircraft ineffectiveness of through life cycle support (TLCS) or life cycle management which is related to weaknesses in the acquisition process.

1.1 Introduction to the Problem

Aircraft availability, either in military or civil aviation should be at the optimum level in order to support an organization’s operational requirements. As for many air forces, the desired state of availability is at least 70%. The maximum allowable aircraft downtime due to waiting for spare parts at the first line, waiting for spare parts at the second line or contractor facilities (CONT) and in-work by the maintenance crew (IWRK) is 10% or below. As for the RMAF, it has faced difficulties in achieving and sustaining the targeted availability in order to support its operational requirements. There were three questions highlighted by this research: Why has the RMAF not achieved and sustained at least 70% of its aircraft availability? How does the RMAF’s present practices given a significant impact to aircraft availability? What is the recommended acquisition conceptual framework that suits the RMAF and helps ensure high aircraft availability?

1.2 The Importance of the Problem

By creating an effective and efficient ACF, it is expected to be able to ensure higher aircraft Av which is in line with the RMAF’s operational requirements in achieving its stipulated mission.

1.3 Literature Review

This section focuses on the definitions and terms used throughout this research, along with ways to conduct the focus group discussion, the acquisition practices practiced by the Malaysian Public Sector, RMA, RMN, DoD USA, MoD UK and ADF, the lessons learnt, and the research gaps in order to identify the CSFs in acquisition, lessons learnt and gaps that this research can try to fill up. This literature review also focuses on learning how to conduct a mix mode method (quantitative and qualitative) research, conduct surveys and interviews, and develop questionnaires. The literature review is started with the definition of terms used throughout this paper as shown in Table 1.

Table 1. Definition of terms

Term	Definition
Availability	Aircraft availability refers to the daily percentage or number of aircraft in serviceable condition and ready for operations (RMAF HQ PU 2302, 2005; Perez <i>et al.</i> , 2009). The ADF also used the term asset Av as one of its performance measures (ADF Defence Capability, 2012). PeriyarSelvam <i>et al.</i> (2013) defined aircraft availability as serviceable aircraft as a result of maintenance activities which consist of servicing, repair, modification, overhaul, test, check and inspection of condition. Availability is one of the performance measures used to monitor system performance by the DoD USA, MoD UK, and ADF.
Defense acquisition	Defined as a process of defense products’ life cycle management (The DoD Defense Acquisition University (DAU) Press, 2016). In addition, Schwartz (2013) has generally used the terms acquisition and procurement interchangeably.
Integrated Logistics Support	A comprehensive and structured approach to the management of total support in a system’s life cycle (The USA Army Regulation 700–127, 2014; MoD UK, Joint Service Publication (JSP) 886 Volume 7 Part 1, 2012; and JSP 886, 2014)
Total Life Cycle Support	Refers to the supportability of aircraft during its whole life starting from the early phase of entering into service until the disposal phase (DoD Federal Acquisition Regulation 2.101 (FAR 2.101), 2016; Schwartz, 2013)
Public-Private Participation	It is a concept of civil-military integration in the aviation defense industry that is used throughout this paper. Bellais (2014) consider PPP as a means to complement public investment with private funding in defence.
Offset	The Department of Commerce USA (2012) - Bureau of Industry and Security defines offset in the defense trade as industrial compensation arrangements requested by foreign countries as a condition of the purchase of weapon systems and services from non-domestic suppliers either directly related or unrelated to the purchased weapon systems or service.

The literature review is conducted to identify the CSFs, gaps, and lessons learnt in acquisition. Table 2 summarizes the literature related to the critical success factors, gaps and lessons learnt in acquisition.

Table 2. Literature review - critical success factors, gaps and lesson learned in acquisition

Author, year, title	Research Problem	Data Collection	Critical Success Factors in Acquisition	Research Output	Areas not Addressed
Vucetic (2016). Title: Who framed the F-35? Government– media relations in Canadian defence procurement	-national defence procurement where role of the news media has been lacking. - Total cost of \$9 billion for F35 project: procedural wrong-doing, scandal and ministerial irresponsibility & misleading cost.	-Analysis of F-35 fighter jet procurement controversy. - Analysis of articles from five newspapers e.g. the Globe, and the Toronto Star.	PPP e.g. Department of Public Works and Government Services Canada (PWGSC) works with Lockheed Martin company (OEM for F-35), Policy e.g. Defence Acquisition Guide (DAG), contract, good governance, cost, PM (cost)	- F35 case, media challenged the government decision e.g. for cost misleading etc. -ageing CF-18 fighter replaced by 65 F-35s. -a policy “reset,” and start all over again with new monitoring body namely the National Fighter Procurement Secretariat (NFPS) to ensure good governance.	ILS, AOP, AMF, competency
Juanita <i>et al.</i> (2016). Title: Procurement fraud in the US Department of Defence -Implications for contracting processes and internal controls	Procurement fraud incidents in the DoD USA	Qualitative case study in DoD office e.g. analysis of contract management processes	Ethical (good governance), PM (performance reviews), contract management processes (AMF), suppliers (logistic support), policies, procedures, specific education, training and experience requirements (competency)	the source selection phase and contract management had the majority fraud incidents in DoD and require support by effective policies and procedures.	PPP, cost (limited discussion)
Miller and Ray (2015). Title: Moving from Best Practices to Standard Practices in Defence Acquisition	Isolated best practices that failed to become widespread standard practices.	Case Study (interview & observation) on Defence Contractor, Manufacturer, Mutual Insurance, and Structural Fabrications.	PPP, AOP, cost, PM, and AMF	Process standard: inherent stakes, work replicability, organization alignment, making advantages visible, standard work and compliance.	ILS, reg., competency, governance
Chad and Stephen (2015). Title: Conceptual Framework for Defence Acquisition Decision Makers: Giving the schedule Its Due.	Failure to develop a theoretical framework within the acquisition system.	-Literature review -Archival	PPP, regulation, cost, PM, acquisition management	Conceptual models based on economic and operations research principles.	ILS, AOP, competency, governance
Gaither (2014). Title: Incorporating Market-Based Decision-Making Processes in Defence Acquisitions	Developing major weapon systems too often incurs significant cost overruns	-Literature review -Archival	PPP, limited discussion on AOP, cost, PM, and limited discussion on AMF	Defence Acquisition Bonds introduces a financial intermediary and investors into acquisition process.	ILS, reg, competency, and good governance
Burgess and Balakrishnan (2014). Title: Challenges in Matching Performance Metrics to Defence Acquisition	identify the performance measures best suited to support military acquisition activities	Case study – interview on: -MoD (UK) -National Audit Office (NAO). -Five major UK based defence suppliers. A review of the measurement methodologies used by all of these parties in military acquisition activities	Focused on PM, cost, limited discussion on PPP	No clear set of measures is yet available. An extended research program will be required	ILS, reg, AOP, AMF, competency and governance.
EBig <i>et al.</i> (2014). Title: Exposure-Capacity-Portfolio for Defense Supply Chains – The Case of the Military Airlifter A400M.	Lacks of management tools to better steer the Defence industry	Case Study - Military Airlifter A400M	Supply change management (Logistic support), PPP, cost, PM - expenditure cost, AMF	Develop the management tool enabling armed forces to better steer the defence industry, reducing the procurement expenditures.	Reg, AOP, competency and governance
Caldwell and Howard (2014). Title: Contracting for complex performance in	The impact & challenges of contractual	Case study: Major military platforms (naval and air	Supply chain, PPP, PM (outcome-based contracting)	The new contractual arrangements show an increasing shift in	Reg, AOP, cost, AMF, competency and

Author, year, title	Research Problem	Data Collection	Critical Success Factors in Acquisition	Research Output	Areas not Addressed
markets of few buyers and sellers	arrangement on UK military procurement and other limited.	defence). -Interview -Archives		responsibility to the prime contractor	governance.
Aguado-Romero <i>et al.</i> (2013) Title: Auditing defence procurement contracts in the European context: an inter-country analysis.	A problem arises in most developed countries concerning the existence of a non-competitive market.	Comparative analysis: Case Study in Four European countries (UK, France, Spain and Norway) -Literature -Archival	PPP, regulation, cost, PM – cost	The contract auditing models do not present a high degree of harmonization of defence contract cost evaluation.	ILS, AOP, AMF, competency and governance.
Stewart and Ablong (2013). Title: Australian defence procurement goes wrong: Improving outcomes in a troubled contractual	Problems with schedule and budget overruns in Australian defence procurement	Three Case studies	PPP, regulation, AOP, cost, PM (value for money), competency, good governance	Business process reforms, tightening control and improving professionalism. the importance of relational factors of trust, collaboration and risk-sharing	ILS and AMF
Schwartz (2013) Title: Defence Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process.	Both Congress and DoD USA focused to improve defence acquisitions through better buying power initiative	Case study: DoD USA	ILS, PPP, statutory and regulatory, AOP, LCC (budget), PM (Av & PBL), AMF, and competency	Reformed: DoD launched the "Better Buying Power 2.0" initiative e.g. Using appropriate contract type, depending on the situation (not limiting to firm-fix-price contract).	Limited discussion on good governance
Rosen (2013) Title: Strategic Planning and Management in Defence Systems Acquisition	Strengthen the management of defence acquisition organizations or programs	Survey of the defence acquisition community	PM (Direct measurable), attitude towards good governance	Use SP&M methods to strengthen the management of defence acquisition organizations	ILS, PPP, regulation, AOP, cost, AMF and competency
Bowyer <i>et al.</i> (2012) Title: How to acquire aircraft? A grounded theory approach to case study research	The investment decision to acquire aircraft within an industry that is small by world standards.	Case study. Primary data from semi-structured and open-ended interviews. Secondary data: pro-forma aircraft lease	ILS - Engineering requirement, cost, PM (Cost and profit), AMF (limited to Model for Aircraft acquisition)	Model aircraft acquisition decision-making focus on: financing: buy, lease or contract. economic, political, environmental competitive& engineering requirement.	PPP, regulation, AOP, competency and governance
Euske <i>et al.</i> (2012) Title: How does the Cost Performance of Defense Contracts Vary Among Services and Contractors?	The cost performance of defence contracts varies among the Air Force, Army, Navy, and the DoD and among industries. Evidence from Major Defense Acquisition Programs (MDAP)	Collect data from defence acquisition management information retrieval (DAMIR)	PPP, regulation, cost, PM	Data analysis indicates that the Navy ranks last among the military services and DoD in cost performance for MDAP contracts, while the Air Force ranks best. Of the defence contractors, Raytheon ranks last in cost performance	ILS, AOP, AMF, competency and governance
Venelin (2010) Title: Modelling Defence Acquisition Strategy	Model the process of defence acquisition strategy development	Modelling the defence acquisition Process	PPP, regulation, PM (Balanced scorecard (BSC))	Modelling: -Desired military capabilities, the defence missions and tasks, the nation's defence policy, in line with the level of ambition, budget resource restrictions, and level of associated risk	ILS, AOP, cost, AMF, competency and governance.
Lavallee (2010) Title: Civil-Military Integration: The Politics of Outsourcing	Globalizing defence industrial sector through the concept of civil-military integration poses unique challenges for U.S. strategic policy.	-Literature review. -Archival	PPP, cost, PM (Cost, -Schedules, and -Performance. (Cheaper, Faster, Better)	US Defence Reform Initiative (DRI) (1997): The Push to go commercial	ILS, regulation, AOP, AMF, competency and governance
Perez <i>et al.</i> (2009) Title: Acquisition and Development Methodology of Aircraft, Systems and	Organizing the planning and execution of phases and main events of	-Literature review. -A processes modelling methodology	limited discussion on ILS, PPP, regulation, LCC, PM (LCC and availability)	A processes modelling consists nine stages: Design, feasibility, definition, development,	AOP, AMF, competency and governance

Author, year, title	Research Problem	Data Collection	Critical Success Factors in Acquisition	Research Output	Areas not Addressed
Materials of the Brazilian Air Force	the lifecycle of systems and material.			production, deployment, use, revitalization, and deactivation	
Humphries and Wilding (2004) Title: Sustained monopolistic business relationships. A UK defence procurement case.	Business-to-business Relationships monopoly of supply or demand.	Triangulation. questionnaire survey a five-point Likert scale) & qualitative (semi-structure interview) in MoD, UK and industry.	PPP, regulation, PM (value for money)	An approach to solving this problem thru Co-operation, co-ordination and collaboration (C3 behaviour)	ILS, AOP, cost, AMF, competency and governance.
Woodford and Smith (1998) Title: The Minimization of Combat Aircraft Life Cycle Costs Through Conceptual Design Optimization	Procurement of more cost-effective military equipment.	-Literature review. Conceptual Design Optimization	ILS (limited to LCC), LCC, PM (LCCt)	Conceptual design optimization has minimized of combat aircraft life cycle costs. twin to single-engine aircraft designed for the same mission and constraints.	PPP, regulation, AOP, AMF, competency and governance
Graham and Hardaker (1998) Title: Defence sector procurement and supply chain relationships (MoD UK).	To link the competitive performance of small, high technology defence firms to their ability to adapt to changes in the procurement process	-Qualitative and quantitative, case studies: Survey on 150 firms by post and telephone, 40 interviews, observation	PPP, cost, PM (The percentage success rate of tendering for defence sub-contract work), AMF	Strategic management framework which suggests a close relationship between industry structure, strategy and performance.	ILS, regulation, AOP, competency and governance
Beesly (1966) Title: Some Aspects of Military Aircraft Procurement	Current procurement Procedures improvements For production methods	-Literature -Observation	PPP, regulation, cost, PM	Combined effort government and industry. Consider money spend on aircraft research, design and development.	ILS, AOP, AMF, competency and governance
Delano (1999) Title: Critical success factors for DoD program managers.	DoD acquisition programs frequently face cost overruns, poor performance, schedule delays or cancellation.	Literature review and survey (21 respondents).	Explicit requirements, PPP, total quality, stability e.g. no rapid changes in budget etc., performance objectives (PM), cost objectives (LCC), meet operational capability date (Timely AMF), work well (av), adequate manpower, competency and good governance.	CSFs consist of: 1. Acquisition Factors - well defined requirements, strategy, works well when in service and stability 2. Resource Factors – competent and quality people at all level (good governance)	ILS, regulations. AOP
Ayhan and Üstüner (2015) Title: Governance in public procurement: the reform of Turkey's public procurement	Good governance in Turkey public procurement are hard to sustain	Case study-analysis of the Turkish public procurement -Literature review -Archival	PPP, regulations, PM (Level of good governance), governance. Limited discussion on cost.	Implementation of good governance as part of practice	ILS, AOP, AMF, competency
Ribeiro and Furtado (2014) Title: Government Procurement Policy in Developing Countries: The Case of Petrobras	Promote innovation by firms located in developing countries	-Literature -Case Study: field research interview semi-structured questionnaires	PPP and PM - Level of technological learning/ innovativeness (assume)	Government Procurement Policy stimulates innovation by firms located in developing countries.	ILS, regulation, AOP, cost, AMF, competency and governance
Mohammad Reza Mohammadi (2013) Title: Ranking of Critical Success Factors of e-procurement in Iranian Automotive Industry	Any communications business needs to reduce cost, and time, increasing accuracy, speed and transparency as well as reducing time and financial costs	35 researches related to CFSs was investigated. CSFs selected based on the frequency in the literature	Top management commitment, security, process, supplier supporting, IT infrastructure and trained and skilful employees	CSFs in car manufacturing industry of Iran: Top management commitment, security, process, supplier supporting, IT infrastructure and competent employees	Regulations, AMF, good governance
Hui <i>et al.</i> (2011) Title: Procurement issues in Malaysia	Issues such as accountability transparency, corruption, integrity and cronyism pertaining to the	Interviews – Six main themes	PPP, regulation, cost, and performance measure	Required improvement. Interference from outside parties, cronyism, malpractice and non-compliance to the policies	ILS, AOP, AMF

Author, year, title	Research Problem	Data Collection	Critical Success Factors in Acquisition	Research Output	Areas not Addressed
	public procurement system in Malaysia.				
Rong <i>et al.</i> (2010) Title: Acquisition strategy of complicated equipment based on optimization theory	The problem of high equipment acquisition risk and cost	-Literature review. -Archival	AOP, competency	Mathematical Model (QUAN)	ILS, PPP, regulation, cost, PM, and AMF
Cheung <i>et al.</i> (2010) Title: Suitability of procuring large public works by PPP in Hong Kong	PPP has increasingly been suggested in projects, but the suitability of using this procurement method in Hong Kong is yet to be studied empirically. Delay due to politics debate and length delay for Negotiation	Questionnaire survey	PPP, PM, competency	The attractive factors to work in PPP were scored higher than the negative factors	ILS, regulation, AOP, cost, AMF
Raymond (2008) Title: Benchmarking in public procurement.	Poor procurement practices hinder sustainable development and negatively impact upon economic growth in developing countries	Using benchmarking in procurement process and perceived weaknesses. - Literature review -Case Study – Sri Lanka Public Sector	PM (Value for money, professional work force, ethics, accountability, transparency), attitude.	Framework Must include measures to address issue of accountability, transparency, value for money, professional workforce and ethics. These to overcome weaknesses in the public procurement process and effective measurement.	ILS, PPP, regulation, AOP, cost, AMF
Gregory (1992) Title: Impact of life cycle cost on procurement Decisions	Historically, major Procurement decisions were made solely on the basis of performance and acquisition cost comparisons.	-Literature review.	Limited discussion on ILS, PPP, LCC and PM	Implementing Overall Life Cycle Costs Calculation	Regulation, AOP, AMF

Note. ILS = Integrated Logistics Support, PPP = Public-Private Participation, Reg = Regulation, AOP = Acquisition Operational Process, AMF = Acquisition Management Framework, SCM = Supply Chain Management, Eng reqt. = Engineering requirement, LCC = Life cycle cost

The literature review highlights 9 CSFs in acquisition which consist of integrated logistics support (ILS), public-private participation (PPP), regulations and policy, acquisition management framework (AMF), acquisition operational process (AOP), performance measure (PM), life cycle cost (LCC), competency of personnel, and good governance. In addition, the literature reviewed highlighted 19 elements associated to acquisition which consist of performance based logistics (PBL), Safety & reliability centered maintenance (Safety & RCM), failure mode, effect and criticality analysis (FMECA), logistics support analysis (LSA), logistics support analysis record (LSAR), computer aided logistics support (CALs), reliability, availability and maintainability (RAM), TLCS, level of repair analysis (LORA). In parallel, acquisition also requires effective maintenance planning, technical data, manpower and personal, supply support, support & test equipment, computer resource support, facility, packaging handling storage and transportation (PHS&T) e.g. NATO standards, design interface and binding contracts. Furthermore, all agreements associated to acquisition have to be in the form of binding contracts. These CSFs have been practiced by DoD USA, MoD UK and ADF with differences in terms of in-house processes. Nevertheless, DoD USA, MoD UK and ADF use almost similar CSFs and elements associated to acquisition. This research plans to use these CSFs and elements associated to acquisition to develop its preliminary ACF I. Table 3 shows 9 CSFs and 19 elements associated to acquisition as suggested from the literature.

Table 3. 9 CSFs and 19 elements associated to acquisition suggested from literature

CSFs and Elements Associated to Acquisition	Discussion
<u>1. ILS</u> <u>ILS ten principles element (DoD USA)</u>	MoD UK, JSP 886 (2014) instructions for ILS implementation in acquisition is similar to DoD USA consist of: ILS planning, maintenance planning, supply support, support and test equipment, facilities and infrastructure, training and training equipment, technical information, PHS&T, human factors integration, RAM, disposal and termination.

Maintenance planning	Umar Al-Turki, (2011) defines maintenance planning as activities to maintain required availability and reliability of system and component to operate at standard quality. e.g. activities in maintenance concept, first line (OLM), second line (ILM), third line (DLM), MRO etc. or description of the requirements and tasks to be accomplished for achieving, restoring, or maintaining the operational capability of a system, equipment, or facility.
Technical data	According to MoD UK, JSP 886 (2014), technical data consist the information require to operate, maintain, repair, support and dispose of any equipment throughout its life cycle e.g. engine data, airframe hours, propeller hours, illustrated part catalogue etc.
Manpower & personal	e.g. adequacy human resource at all level, project team, field service representative (OEM) etc.
Supply support	e.g. Spare parts, paint, oil, lubricant etc.
Support and test equipment	Support equipment i.e. ground support vehicle, ground support equipment, vibration test set etc.
<u>2. Training (competency) & training support</u>	To achieve certain level of knowledge. Terry <i>et al.</i> (2007) once highlighted that aircraft quality assurance need to have wide variety of functional disciplines expertise. According to Delano (1999), well-educated and highly competent personnel are importance for successful acquisition e.g. competency, innovation, computer based training etc.
Computer resource support	It includes the facilities, hardware, software, documentation, manpower, and personnel require to operate and support systems related to equipment e.g. central processor input output module (CPIOM) software for A400M aircraft, computerize maintenance management system, on-line technical support etc.
Facility	e.g. hangar, engine bay, hydraulic bay etc.
PHS & T	MoD UK, JSP 886 (2014) defines PHS & T as the resources, procedures, design and methods in ensuring all products are packaged, handled, stored and transported properly in accordance with standard, legislation, particularly for hazardous items e.g. packaging in accordance with NATO standard etc.
Design interface	Fielding (1980) highlighted on the importance of designer and operator to exchange data and work together to improve reliability e.g. possibility of involvement in design development under offset program etc.
<u>ILS Ten Supporting Element</u>	
LSA	to define, analyze, and quantify logistics support requirements. According to JSP 886 (2014) LSA functions is to identify the optimum support resource requirements for the whole life cycle of equipment.
LSAR	Is record/documentations for LSA kept for future reference
CALS	Computer aided acquisition and logistics support e.g. software and hardware for spare parts provisioning etc.
RAM	<u>Reliability</u> is the ability of item to perform a required function under stated condition for certain period of time i.e. Calculation of components mean time between failure. Fielding (1980) suggested the establishment of a National Aerospace Reliability Data Bank in UK. <u>Availability</u> is system/product ready for task. <u>Maintainability</u> : According to Pryor and M.B.E. (1964) deviation from reliability/unserviceable items require economy maintainability in order to put it back to available condition.
FMECA	Failure, modes is the way or mode in which aircraft/component might fail, effects, and criticality analysis i.e. records of propeller over speed, effect and criticality. Effect and criticality analysis is studying on the consequences of failure.
TLCS	Product support throughout life cycle & safety in all aspects i.e. provisioning for spare parts.
LORA	Level of repair analysis i.e. in-situ repair, second line servicing, third line – overhaul etc.
3. LCC	is cost implications i.e. acquisition cost, in-service cost, disposal cost. Sokri (2014) defined LCC as an economic assessment that includes the operation and maintenance cost of systems over its life cycle. Case study Canadian Arcturus fleet, the results show that operation and maintenance costs approximately 70.81% of the overall life cycle cost. DoD USA also focus on LCC as instructed in Directive 5000.1- the Defence Acquisition System, and Instruction 5000.2 - Operation of the Defence Acquisition System.
RCM	A process in analyzing the functions and potential failures for aircraft/component. Mishra (2016) suggested the implementation of RCM by weighing all opportunities and threats for strategic decision.
PBL	One of performance measure. Other performance measure i.e. direct measurement, turn-around time repair etc. According to Glas <i>et al.</i> (2013), problem in increasing support cost for complex system i.e. aircraft can be addressed through PBL.
4. PPP	Ecosystem for public-private participation in aerospace defence industry e.g. ToT in offset program is agreement that exporter to ensure ToT and undertake activities in order to satisfy the importer requirements (Ilanakiev, 2014). Alinaitwe and Ayesiga (2013) in case study in the construction industry in Uganda highlighted, successful PPP implementation require a competitive procurement process, a well organised private sector, competent personnel and good governance. In acquisition, DoD USA policy encourages early industry involvement (Federal Advisory Committee Act (FACA) and FAR Part 15). Beaugency <i>et al.</i> (2015) studied different approaches on PPP. Case study on Airbus not outsourcing the development and production of flight control systems contrary to Boeing that work together with other vendors. The main objectives for both is cost reduction.
5. AMF	Explicit acquisition management framework with process and specific timeframe. Bowen (1996) in case study of RAAF Orion aircraft maintenance has proposed total quality management in maintenance, translated into a process, mapping, and measured to collect valuable data. Samaranyake <i>et al.</i> (2002) proposes effective control of project management and predict spare parts requirement to minimise aircraft downtime. According to Schwartz (2013), a milestone in acquisition management (DODI 5000.02, 2015) is required to oversee and manage acquisition programs. At each process, a program must meet specific DoD USA requirements before can proceed to the next phase of acquisition process.
6. AOP	Explicit acquisition operational process. Worger <i>et al.</i> (2014) mentioned that, AOP would help reduce program development delays and cost overrun. At each acquisition process (AOP) it must meet DoD USA requirements before proceed to next acquisition process (Schwartz (2013)
7. Regulation & policy	Supporting regulation and policy in acquisition. According to Worger <i>et al.</i> (2014) supporting policy can improve DoD' complex acquisition process.

8. Performance measure	To measure achievement. According to Kevin <i>et al.</i> (2014) measuring a company's performance help an organization to achieve and maintain success. Parida <i>et al.</i> (2015) mentioned that, measurement of maintenance output and its quality are required to justify investment. DoD Defence Acquisition Guide Book (2013) highlighted, the acquisition strategy should include a performance-based business strategy.
9. Good governance	Manage with good ethics. According to Alinaitwe and Ayesiga (2013) one of CSF in PPP is good governance. Ayhan and Üstüner (2015) in case study Turkish public procurement, highlighted about the importance of implementation of good governance as part of practice. In line with Juanita <i>et al.</i> (2016), highlighted the fraud incidents in DoD USA procurement which generally happen during source selection, contract management phases, control activities and this issue need to be addressed.
Binding contract	Acquisition agreement in a binding contract and performance measure as an integrated performance measurement to optimize weapon systems Av i.e. contract with OEM for A400M using availability as performance measure. Type of contract e.g., firm fixed-price (FFP), fixed-price incentive etc. (DoD Defence Acquisition Guide Book, 2013)

Legend:

- 9 CSFs in acquisition
- 19 elements associated to acquisition

1.4 The Hypotheses and Their Correspondence to Research Design

Three Questions (Q) were put forward: Q1. Why has the RMAF not achieve its aircraft Av as its desired objectives? Q2: How do the RMAF's present acquisition practices given significant impact to aircraft Av? Q3: What is the recommended ACF to be used to ensure higher aircraft Av? In answering these questions, the mix mode method (Quantitative and Qualitative) data collection was used. A research using the mix mode method data collection has more confident results and enriched explanation of the research problem by combining qualitative and quantitative research methods (Starr, 2014; Aldebert & Rouzies, 2014; Bhattacharjee, 2012; Tashakkori & Teddlie, 2010; Salehi & Golafshani, 2010).

2. Methodology

This chapter will describe the overall research methodology. Research methodology is the process to collect information and data for analysis. It includes publication research, interview, surveys, experiments, observation and others. According to Khotari (2005), research methodology is a way to solve the research problem systematically or the science of studying how the research is done. The research methodology is divided into ten steps. The research methodology used was modified and adopted from the works of Durugbo and Erkoynuncu (2016); Caldwell and Howard, (2014); Jefferies *et al.* (2014); Starr (2014); Davids *et al.* (2013); Glas, Hofmann and Eßig (2013); Cheung *et al.* (2012); Bowyer and Davis (2012); Burgess and Balakrishnan, (2014); Eßig *et al.* (2014); Aguado-Romero *et al.* (2013); Abd Rahman Abdul Rahim and Baskh (2003); Yin (1994).

2.1 General Ideas of Research Methodology

Figure 1 shows the general ideas of the research methodology which consists of six steps.

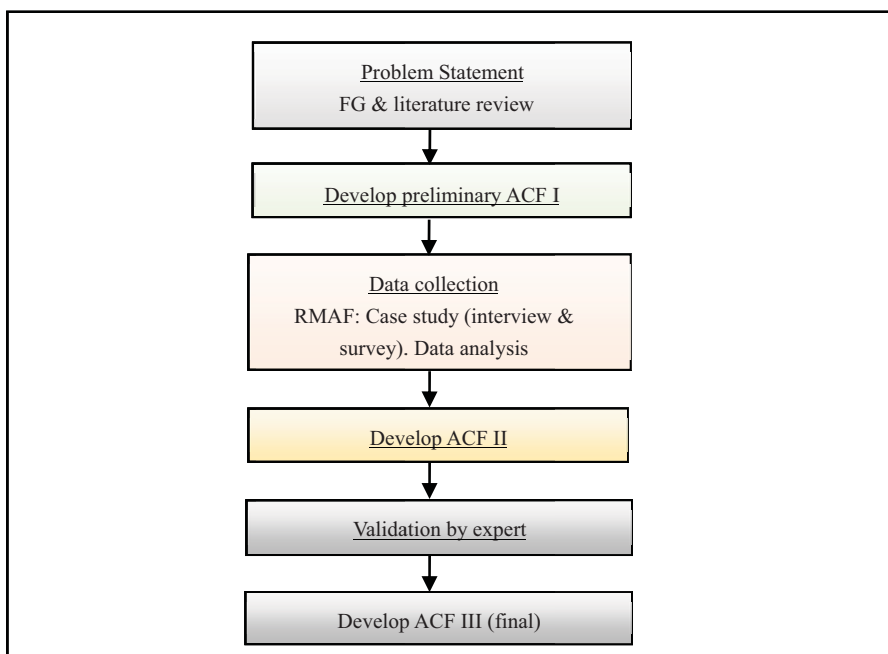


Figure 1. General ideas of research methodology

A focus group discussion is used as a head start for the research, followed by the literature review where the

preliminary ACF 1 was developed. From the case study results, the preliminary ACF 1 was revised into ACF II. Then, ACF II was validated by experts and revised into ACF III as the final framework. Table 4 shows the general ideas of research question, research objective, data collection, data analysis and research output.

Table 4. Research question, research objective, data collection, data analysis and research output

No	Research Question	Research Objective	Data Collection	Data Analysis	Research Output
1.	Why has the RMAF not achieve its aircraft Av as its desired objectives?	To identify the cause of low aircraft availability in RMAF.	Aircraft status FY 2011 to 2015	Percentage of AWP, CONT and IWRK	Low Av as results of higher aircraft downtime due to AWP and CONT.
2.	How do the RMAF's present acquisition practices given significant impact to aircraft Av?	To identify the RMAF present acquisition practices and its significant impact to aircraft availability	Literature Interview & survey	Themes, coding, category and sub category	Ineffective and inefficient acquisition practices which was based on ad hoc basis.
3.	What is the recommended ACF to be used to ensure higher aircraft Av?	To propose the Acquisition Conceptual Framework for aircraft acquisition in RMAF.	Literature Interview & survey	Themes, Themes, coding, category and sub category	ACF III (final) was developed based on CSFs and elements associated to acquisition.

2.2 A step-by-step Methodology Process

A step-by-step methodology process was shown in Figure 2.

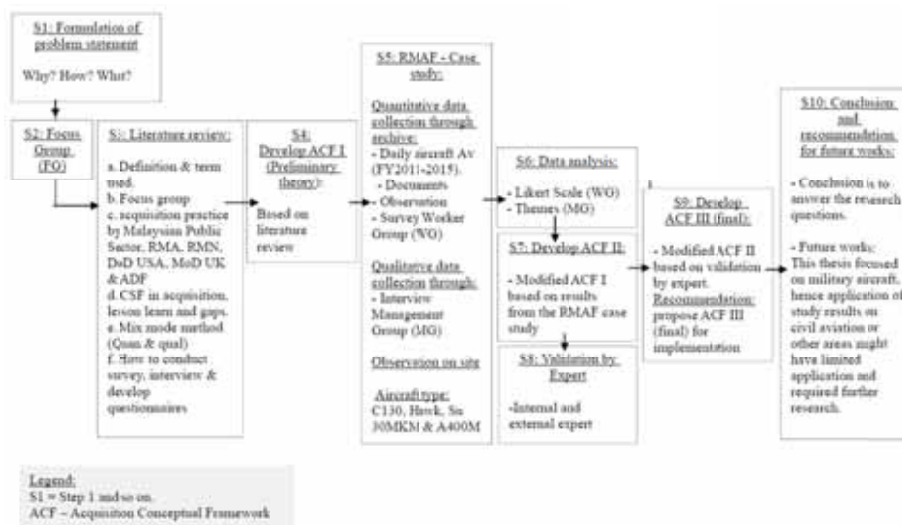


Figure 2. Flow process for research methodology

Figure 2 shows the research methodology which is divided into ten steps. A step-by-step methodology process is shown in the following.

Step 1 (S1): Formulation of problem statement. This section discussed the problem faced by the RMAF by focusing on aircraft availability. Why has the RMAF not achieved aircraft availability as per its desired objectives? How do the RMAF's present acquisition practices give a significant impact on aircraft availability? What is the recommended acquisition conceptual framework to be used to ensure high aircraft availability?

Step 2 (S2): Focus group. This research started with a discussion with a focus group (Starr, 2014) which consists of eight senior officers led by a moderator (Salant and Dillman, 1994) and supported by observation of actual practices in the field (Starr, 2014; Abd Rahman Abdul Rahim and Baskh, 2003).

Step 3 (S3): Literature review. Literature review was conducted with the purpose:

- To determine the critical success factors in acquisition and the research gaps.
- To carry out discussion with a focus group.
- To conduct a case study on the RMAF through survey, interviews and participant observation.
- To identify the lessons learnt on acquisition practices in the Malaysian public service, the Royal Malaysian Army and Navy, the DoD USA, the MoD UK and the Australian Defence Forces.

Step 4 (S4): Develop preliminary ACF I. Observation on the field and literature review were used to develop ACF I.

Step 5 (S5): Case study on the RMAF. The Type A, Type B, Type C, and Type D aircraft were chosen as case

studies to identify the lessons learnt, weaknesses and good practices. The research adopted the mixed mode method to collect quantitative and qualitative data (Starr, 2014; Davids, *et al.*, 2013). Data collection was carried out using daily aircraft availability status taken from 2011 to 2015 along with other documentation such as regulations, directives, policies, procedures, and related publications available at the MoD library and observation of actual practices in the field (Glas *et al.*, 2013; Cheung *et al.*, (2012). This research employs a survey questionnaire for the worker group with ordered choices. Qualitative data collection from the management group was done through face-to-face interviews using semi-structured and open ended questionnaires (Bowyer and Davis, 2012). According to Burgess and Balakrishnan (2014) and Davids *et al* (2013), face-to-face interviews yield more precise answers than other techniques. The management group respondents were given a copy of the preliminary ACF I two days earlier (before the interview took place) to ensure that they have ample time to read. Respondents from the management group were asked to answer a questionnaire on the relevancy of the preliminary ACF I developed in step 4 in order to solicit suggestions for further improvement. Responses from the worker group and management group were recorded for analysis and presented in the matrix table.

Step 6 (S6): Data analysis: The Likert Scale was used to analyse the quantitative data obtained from the worker group. As for the management group, the interview recorded themes for analysis. Data analysis is shown in the next section.

Step 7 (S7): Modification of preliminary ACF I and development of ACF II (Cheung *et al.*, 2012; Rutner *et al.*, 2012; Abd Rahman Abdul Rahim and Baskh, 2003); and Yin, 1994) which was based on the results from data analysis and input from the case studies.

Step 8 (S8): Validation by experts. The modified ACF II was validated by two senior officers in the RMAF and two Senior Managers from Airod Technopower Sdn Bhd. Letters to invite the experts' validation were sent to these four validators.

Step 9 (S9): Develop ACF III (final): ACF II was modified based on input from experts and ACF III was proposed for implementation. This section proposes the final ACF III which integrates all critical success factors in acquisition for the implementation, while also giving some recommendations for further improvement.

Step 10 (S10): Conclusion and recommendation for future work. This section is primarily to answer the problem statement which is “why” and “how” the aircraft in the RMAF fleet have yet to achieve and sustain at least 70 % of availability (Av). Moreover, “what” is the recommended ACF which suits RMAF’s requirements of ensuring higher aircraft Av? This paper focuses on military aircraft; hence the application of the study results on civil aviation or other areas might be limited and require further research.

2.3 Participant Characteristics

The surveys conducted on the WG had involved the RMAF’s technical personnel ranging from the rank of Airmen to Warrant Officer, and the interviews with the MG involved officers ranked from Second Lieutenant to Brigadier General who had worked on the Type A, Type B, Type C, and Type D Aircraft.

2.3.1 Sampling Procedures

The research study adopted a group-administered survey (Bhattacharjee, 2012; Sekaran & Bougie, 2009; Maxim, 1999) where the WG has to answer sixteen (16) semi-structured questionnaires which are closed-ended with all-points-anchored response options. Face-to-face interviews were conducted on twenty (20) out of twenty (20) respondents from the MG. They had to answer twenty-one (21) semi-structured questionnaires with open-ended answers. Then, five people from the pilot team of the WG and five people from the MG were selected for pretesting, validating and trying these questionnaires. Based on the comments from the pilot team, the questionnaires were amended before the actual survey was made. The Likert Scale (Likert, 1932) was used in this project as shown in Table 5.

Table 5. The five points scale, closed-ended with all-points-anchored response options for the Worker Group

<u>Strongly Disagree (SD)</u>	<u>Disagree (D)</u>	<u>Neutral (N)</u>	<u>Agree (A)</u>	<u>Strongly Agree (SA)</u>
1	2	3	4	5
<u>Never</u>	<u>Almost Never</u>	<u>Neutral</u>	<u>Most of the Time</u>	<u>Always</u>
1	2	3	4	5

This study adopted the five-point scale with all-points-anchored response options (Chueng *et al.*, 2010; Ellis, 1994; Likert, 1932) for the WG. The WG has to make a choice by circling the number 1 or 2 or 3 or 4 or 5 in the column that represents their feelings according to its choice of either, “Strongly Agreed” (5), “Agree” (4),

“Neutral” (3), “Disagrees” (2), “Strongly Disagreed” (1). These questionnaires also ask the respondents’ feelings on their day-to-day work too, with the options of either, “Always” (5), “Most of the Time” (4), “Neutral” (3), “Almost Never” (2), “Never” (1). The results were recorded in a matrix table.

2.3.2 Sample Size

This research study adopted a sample size with a 95% confidence level. There were twenty out of the twenty respondents from the MG (+3% estimated sampling error). Respondents from the WG numbered at 120 out of 150 respondents (+5% estimated sampling error) as suggested by Salant and Dillman (1994). The results are depicted in a table form. The research questions were answered with more than 70% response rate, exceeding the response rate recommended by Crofts *et al.* (2008), Janes (2001), and Maxim (1999). The survey time was 15 to 45 minutes (Janes, 2001).

3. Results

This section shows the results from the literature review, case study and validation process.

3.1 Results from Literature Review

There are the findings:

3.1.1 Critical Success Factors in Acquisition

The literature review highlighted 9 CSFs in acquisition and 19 elements associated to acquisition for this research to develop the preliminary ACF I as shown in Figure 3.

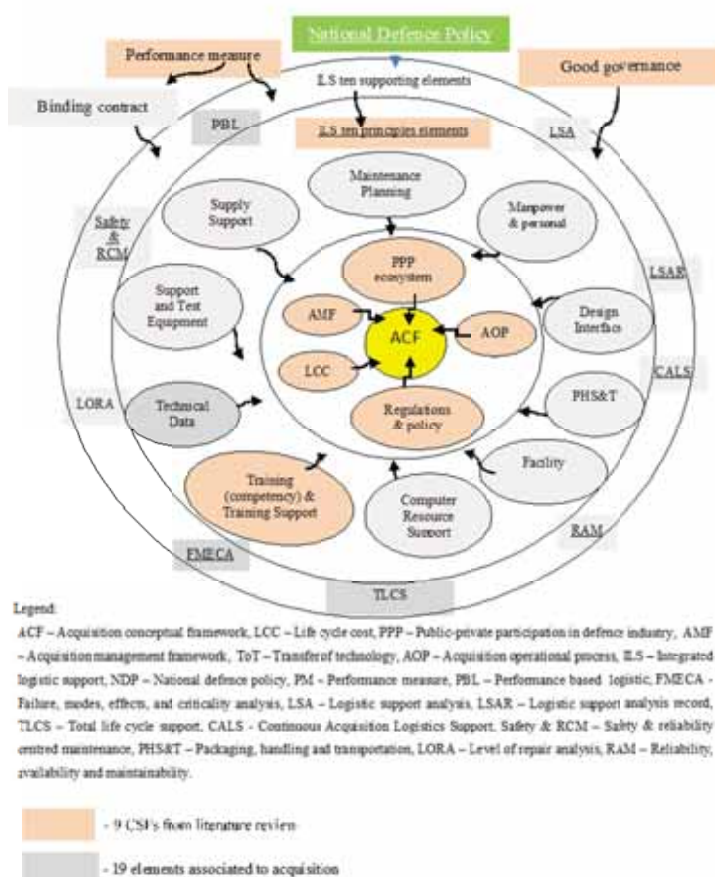


Figure 3. Preliminary acquisition conceptual framework (ACF I)

Figure 3 shows the preliminary ACF I that was developed using the 9 CSFs and 19 elements associated to acquisition obtained from the literature review and which was modified to ACF II based on the RMAF’s case study result.

3.1.2 Gaps in Literature

The literature review conducted presented gaps where there still is an unclear acquisition framework which integrates the CSFs to suit the RMAF’s unique requirement (e.g. require robust system for military concept of

operations (CONOPS), all weather operations and etc) and is compatible to the local industry’s capability. The acquisition frameworks used by the DoD USA, MoD UK, and ADF are not suitable for the RMAF because the Malaysian aviation industry still lags behind compared to those advance countries (Malaysia Defence Security Report Q4, 2011). Therefore, other frameworks are not suitable to the RMAF. In addition, integration among the 9 CSFs and 19 elements associated to acquisition in literature was unclear and is separately discussed in different topics. These are the knowledge gaps that this study hopes to fill. Preliminary finding from the focus group discussion, observation in the field and literature review found limited discussion of CSFs in acquisition, which is similar to the present practices in the Malaysian public sector, the RMA, and the RMN.

3.2 Results from Case Study

Based on the data collected from the RMAF ASHQ, the percentage of three aircraft’s Av from year 2011 to 2015 (Type A, Type B, and Type C) is below the targeted 70% Av. The aircraft downtime is because AWP is approximately 23% and CONT is approximately 25%, which are higher than the targeted ≤10% for each downtime. Downtime due to IWRK is below 10% and is within the target limits. However, there was limited one year data available for Type D Aircraft with 90% Av, 5% AWP and 5% IWRK, since it had recently entered into service in Jan 2015.

3.2.1 Worker Group Survey Results

This section shows the measurement category, questionnaire, survey results and average of the survey results for the WG. Answers with higher degrees of agreement are on the right-hand side of the matrix in Table 6. Then, the results are summarized in Table 7.

Table 6. Showed the measurement category, questionnaires, survey results and average of the survey results for the Worker Group

Measure Category	Questionnaires (Worker Group)	RESULTS (%)				
		Strongly disagreed (a)	Disagreed (b)	Neutral (c)	Agreed (d)	Strongly Agreed (e)
(The Answer with higher degree of agreement is on the right-hand side)		(1)	(2)	(3)	(4)	(5)
Cat 1: Effectiveness (E) / Ineffectiveness (IE) of ILS in RMAF current practice IE>97%	Q1. I use more time looking for aircraft spares than I work on aircraft troubleshooting.	1 (0.83%)	1 (0.83%)	1 (0.83%)	22 (18.33%)	95 (79.16%)
	Q2. To what extent you agree, integrated logistics support is not fully implemented at your workplace.	0 (0%)	1 (0.83%)	2 (1.67%)	20 (16.67%)	97 (80.83%)
	Q3. To what extent you agree, logistics support needs to be reorganized in order to ensure spares available on time	0 (0%)	0 (0%)	2 (1.67%)	16 (13.33%)	102 (85%)
	Q4. To what extent you agree, logistics support needs to be planned during aircraft acquisition.	0 (0%)	1 (0.83%)	6 (5.0%)	28 (23.33%)	85 (70.83%)
	Q10. I cannot make aircraft serviceable on time due to spares are not available on time.	0 (0%)	0 (0%)	0 (0%)	2 (1.67%)	118 (98.33%)
	When you think about your work, how often do you experience the following:	Never	Almost Never	Neutral	Most of the Time	Always
	Q14. Not to get spares on time.	0 (0%)	0 (0%)	2 (1.67%)	19 (15.83%)	99 (82.5%)
	Q15. Wasted time in spares robbing (take spare part from other similar type of aircraft).	0 (0%)	0 (0%)	1 (0.83%)	4 (3.33%)	115 (95.83%)
	Q16. Need to hasten for spares.	1 (0.83%)	1 (0.83%)	2 (1.67%)	30 (25.0%)	86 (71.66%)
	AVERAGE	0.25 (0.21%)	0.5 (0.42%)	2 (1.67%)	17.625 (14.69%)	99.625 (83%)

Note. Cat = Category, E = Effectiveness, IE = Ineffectiveness, Q = Question.

Measure Category	Questionnaires (Worker Group)	RESULTS (%)				
		Strongly disagreed (a)	Disagreed (b)	Neutral (c)	Agreed (d)	Strongly Agreed (e)
(The Answer with Higher Degree of agreement is on the Right-Hand Side)		(1)	(2)	(3)	(4)	(5)
Cat 2: Effectiveness/ Ineffective of PPP ecosystem in RMAF	Q7. To what extent you agree that local industry need to increase their support.	2 (1.67%)	1 (0.83%)	1 (0.83%)	16 (13.33%)	100 (83.33%)
	Q8. To what extent you agree that, the government	2	2	2	21	93

aerospace defence industry	sectors need to increase their support.	(1.67%)	(1.67%)	(1.67%)	(17.5%)	(77.5%)
	Q11. To what extent you agree for the government sectors to work together with industry in supporting the aircraft maintenance	2 (1.67%)	2 (1.67%)	4 (3.33%)	22 (18.33%)	90 (75%)
	Q12. To what extent you agree for the industry to increase their capability and specialty before participating at your work place.	2 (1.67%)	2 (1.67%)	6 (5.0%)	22 (18.33%)	88 (73.33%)
(d)+ (e) =	IE>94% AVERAGE	2 (1.67%)	1.75 (1.46%)	3.25 (2.71%)	20 (16.67%)	93 (77.5%)
Cat 3: Adequacy/ inadequacy of Regulation, Policy, Proc	Q5. To what extent you agree that, policy in integrated logistics support is inadequate at your workplace.	2 (1.67%)	2 (1.67%)	15 (12.5%)	11 (9.17%)	90 (75%)
	Q9. To what extent you agree that inadequacy of guideline for industry and government sectors participation in supporting your workplace.	2 (1.67%)	2 (1.67%)	12 (10%)	16 (13.33%)	88 (73.33%)
(d)+ (e) =	IA>85% AVERAGE	2 (1.67%)	2 (1.67%)	13.5 (11.25%)	13.5 (11.25%)	89 (74.17%)
Cat 4: AMF, Cat 5: AOP, Cat 6:PM and Cat 7: LCC	<i>These categories were not measured which is beyond WG responsibility</i>	-	-	-	-	-
Cat 8: Competency of Personnel	Q6. For works I put in the acquisition process of any RMAF equipment, I was trained to do that.	3 (2.5%)	3 (2.5%)	3 (2.5%)	11 (9.17%)	100 (83.3%)
	Q13. If I involve in any RMAF acquisition; I was trained to do the job	3 (2.5%)	2 (1.67%)	2 (1.67%)	11 (9.17%)	102 (85%)
(d)+ (e) =	P>93% AVERAGE	3 (2.5%)	2.5 (2.08%)	2.5 (2.08%)	11 (9.17%)	101 (84.17%)
Cat 9: Governance	<i>These categories were not measured which is beyond WG responsibility</i>	-	-	-	-	-

Note. Cat = Category, PPP = Public-private Participation, IE = Ineffectiveness, IA = Inadequacy, P = Positive Attitude, PM= Performance Measure, AMF= Acquisition Management Framework, AOP = Acquisition Operational Process, LCC = Life Cycle Cost, Q = Question, G/Gov = Good Governance.

Table 7. Summarized the survey results for the Worker Group

Measurement	RESULTS				
	(1)	(2)	(3)	(4)	(5)
Cat 1: Effectiveness of ILS in RMAF current practice was measured by Q1, Q2, Q3, Q4, Q10, Q14, Q15, Q16	0.25 (0.21%)	0.5 (0.42%)	2 (1.67%)	17.625 (14.67%)	99.625 (83%)
	<1%		<2%		IE>97%
Cat 2: Effectiveness of PPP ecosystem in supporting the RMAF Aircraft was measured by Q7, Q8, Q11, Q12	2 (1.67%)	1.75 (1.46%)	3.25 (2.71%)	20 (16.67%)	93 (77.5%)
	<4%		<3%		IE>94%
Cat 3: Inadequacy of policy was measured by Q5, Q9	2 (1.67%)	2 (1.67%)	13.5 (11.25%)	13.5 (11.25%)	89 (74.17%)
	<4%		<12%		IA>85%
Cat 4: AMF, Cat 5: AOP, Cat 6:PM and Cat 7: LCC	Not measured. They were beyond the responsibilities of the WG				
Cat 8: Competency of RMAF personnel was measured by Q6, Q13	3 (2.5%)	2.5 (2.08%)	2.5 (2.08%)	11 (9.17%)	101 (84.17%)
	<5%		<3%		P>93%
Cat 9: Governance	Not measured. Beyond the responsibilities of the WG				

Note. Cat = Category, PPP = Public-private Participation, IE = Ineffectiveness, IA = Inadequacy, P = Positive Attitude, PM= Performance Measure, AMF= Acquisition Management Framework, AOP = Acquisition Operational Process, LCC = Life Cycle Cost, Q = Question.

Table 7 showed the survey results for category one: the effectiveness of ILS in RMAF present practice was measured. Approximately 117 out of 120 respondents (>97%) selected the answer either, “strongly agree” or “agree”, “always”, and “most of the time” which indicated the ineffectiveness of ILS in RMAF present practice (IE>97%). Less than 2% of respondent, was neutral and only 1% disagreed and strongly disagreed. For category two measured the effectiveness of PPP ecosystem in RMAF aerospace defence industry. The results showed that, approximately 113 out of 120 respondents (>94%) answered either, “strongly agree”, “agree”, which indicated

ineffectiveness of present PPP ecosystem in RMAF aerospace defence industry (IE>94%). Less than 3% of respondent was neutral and approximately 4% disagreed and strongly disagreed. For category three, measured adequacy of regulation, policy and procedure in acquisition. The results showed approximately 102 out of 120 respondents (>85%) answered either, “strongly agree” or “agree”, which indicated inadequacy (IA>85%) of regulation, policy and procedure in supporting the RMAF present acquisition process. Less than 12% of respondent was neutral and approximately 4% disagreed and strongly disagreed. For category 4, 5, 6, and 7 were not measured due to beyond WG responsibilities. For category eight, measured the competency of RMAF personnel involved in acquisition. The results showed approximately 112 out of 120 respondents (>93%) answered either, “strongly agreed” or “agreed”, to indicate high competency of RMAF personnel. Less than 3% of respondent was neutral and approximately 5% disagreed and strongly disagreed with that statement. In the next section, the survey results for WG will be compared to interview results from MG.

3.2.2 Interview Results from Management Group

Durugbo and Erkoyuncu (2016) in a case study on mitigating uncertainty for industrial service operations had conducted a multi case study which is guided by research questions, coding process, data cleaning, close reading, categorization, overlapping coding and revision. They considered overlapping coding and encoded text, and also omission. For this project, ideas were adopted and questionnaires for the MG were divided into nine categories (based on the nine CSFs in acquisition) in order to make it measureable. Categories and sub-categories that have strong contingent effects in the acquisition and aircraft Av relationship are presented in Column (a) and defined in Column (b). Column (c) provides the questionnaires. Column (d) provides answers from the interviews. Column (e) provides the number of repetitive theme or words related to each category and sub-category. Column (f) provides information on the repetitive themes or words and the percentage from the total themes. Column (g) provides suggestions or recommendations received from respondents for further improvements. The survey results for the MG are shown in Table 8.

Table 8. Interview results for the Management Group

Measure Categories / Sub Categories (a)	Categories / Sub Categories Definition (b)	Questionnaires (c)	Answers (d)	No. of Repetitive Theme (e)	Repetitive Theme/ Total Themes (f)	Recommendations (Repetitive Themes) (g)
Cat 1: Effectiveness (E) of ILS in RMAF Present Practice (Q1, Q3, Q5)	Whether ILS is effective (E)/ ineffective (IE) in current RMAF practice	Q1. In your opinion, what do you think about the effectiveness of integrated logistic support in RMAF acquisition? Do you want to add any comment?	- ILS is not structured, unorganized, ad hoc basis, unclear process and process owner.	(IE)19 (E)1 (O) 3	(IE)56/69 (81.16%) (E) 4/69 (5.797%) (O) 9/69 (13.04%)	- Reorganize the ILS framework – Agreed with proposal to include ILS ten principle elements and ILS ten supporting elements. - Develop ILS process by project Team (ILS Manager) at MPOU and Material Department MINDEF - ILS started in early acquisition phase and to be ready at least 2 years before aircraft entering into service (EIS). -Competency of personnel and project team. - Early warning for aircraft disposal or at least 2 years before disposal. -Explicit checklist and process in acquisition. -Measuring ILS through PBL. -All ILS documentations i.e. LSAR were to be kept at MINDEF - MPOU Office. (IE)56, E(4), (O)9.
		Q3. To what extent you are satisfied with the effectiveness of ILS in acquisition process? Do you want to add any comment?	-Unavailability of specific ILS process in overall acquisition process.	(IE)18 (E)2 (O) 5		
		Q5. Are you satisfied with proposal for integrated logistics support Framework in RMAF? By referring to ILS do you want to add any comment on that framework?	-Ineffective ILS. -Agree with the proposal. Not in ad hoc basis; shall have timeframe.	(IE)19 (E)1 (O) 1		
TOTAL THEMES				69		

Measure Categories / Sub Categories (a)	Categories / Sub Categories Definition (b)	Questionnaires (c)	Answers (d)	No. of Repetitive Theme (e)	Repetitive Theme/ Total Themes (f)	Recommendations (Repetitive Themes) (g)	
Cat 2: Effectiveness of PPP ecosystem for RMAF and aerospace defence industry was measured by Q8, Q11, Q14	Whether the ecosystem for PPP is effective (E)/ ineffective (IE) in current RMAF practice	Q8. To what extent you are satisfied with spare parts manufacturing by local industries in order to support RMAF aircraft operation. Do you want to elaborate further?	Our industries are nowhere. Industry need to produce aircraft spares locally.	(IE)21 (E)2 (O) 1		- <u>Explicit PPP process flow & process owner:</u>	
		Q11. To what extent you agreed with the proposal of Ecosystem for PPP in acquisition. Do you want to add any comment on the ecosystem framework? Any additional comment?	-Agree. The RMAF and industries need to work hand-in-hand. -win-win situation concept. -Healthy ecosystem. -Fair chances for industries to participate.	(IE)19 (E) 2 (O) -		(IE)62/71 (87.32%) (E) 6/71 (8.45%) (O) 3/71 (4.23%)	-The DID and MIGHT has to propose PPP ecosystem to MINDEF for approval. -PPP process flow: MPOU Office in collaboration with Engineering Department (Secretariat) to advice members of KK Aero.
		Q14. In your opinion, do you satisfy with public private participation in supporting RMAF aircraft operation? If not, what need to be done? Do you want to add any comment?	-Unorganized ecosystem, ad-hoc, -Unavailability of specific PPP flow process in AOP and process owner. -Limited participation (Focus on five pillars industries).	(IE)22 (E)2 (O)2			-Industries and RMAF to involved in offset program.
		TOTAL THEMES				71	
Cat 3: Adequacy of regulation, policy, procedures related to acquisition in RMAF present practice (Q2, Q4, Q9, Q10, Q15)	Whether regulation, policies related to acquisition (A)/ inadequate (IA) in RMAF present practice.	Q2. To what extend you are satisfied with the policy in Integrated Logistics Support to support aircraft operation. If you are not satisfied, why? Do you want to add any comment?	Inadequate. Need development and revision. ILS not clearly discussed on support elements and process owner.	(IA)19 (A)2 (O)1		- Develop/revise regulations and policy related to acquisition:	
		Q4. In your opinion, do you think that regulations at national level are adequate to support the RMAF aircraft acquisition? Do you want to add any comment?	Inadequate especially on spares manufacturing by local industry.	(IA)21 (A)2 (O) -		(IA)	- Spares manufacturing by local industry at national and RMAF Level. -Obsolescence management. -Pre-delivery and final acceptance test - made available before aircraft entering into service.
		Q9. To what extent you are satisfied with the policy in aircraft mid-life review in order to support aircraft operation. Do you want to elaborate further?	-Inadequacy of policy in Aircraft Mid-Live Review.	(IA)32 (A)2 (O)-		112/123 (91.06%) (A) 10/123 (8.13%)	-Aircraft mid – life review -Smart partnership RMAF & industry.
		Q10. In your opinion, do you think supporting policy for aircraft acquisition is adequate? If not, what policies do you think need to be issued? When is the suitable time to issue these policies? Do you want to add any comment?	Inadequate. Require clear regulations and policies.	(IA)18 (A)2 (O)-		(O)1/123 (0.813%)	-AMF -All agreement shall be included in a binding contract. - ILS, - AOP
		Q15. To what extent you are satisfied with the present RMAF policy in aircraft acquisition? If not, which policy needs to be issued? Do you want to elaborate further?	All related regulation, policy, procedure shall be made available. Inadequate.	(IA)22 (A)2 (O)-			-All regulation and policies must be issued at early acquisition stage.
TOTAL THEMES			123		(IA)112, (A)10, A(1)		

Measure Categories / Sub Categories (a)	Categories / Sub Categories Definition (b)	Questionnaires (c)	Answers (d)	No. of Repetitive Theme (e)	Repetitive Theme/ Total Themes (f)	Recommendations (Repetitive Themes) (g)
Cat 4: Effective /Ineffective of AMF in RMAF present practice (Q16)	Whether AMF is effective E)/ Ineffective (IE) in RMAF present practice.	Q16. To what extent you are satisfied with present RMAF's acquisition management framework. By referring to the AMF handed over to you earlier, do you want to add any comment on that framework?	-Unavailability of AMF tailored to the RMAF requirements. -Guideline issued by MoF is too generic. - Lead to weaknesses in TLCS, higher aircraft downtime and low Av.	(IE)23 (E)1 (O)2	(IE)23/26 (88.46 %) (E) 1/26 (3.85%) (O)2/26 (7.69%)	-AMF from MoF tailored to the RMAF's specific requirement. - AMF consist of CSF in acquisition - Required checklist with time frame for every action. Owner is MPOU-Project Team. - require mid-life review (IE)23, (E)1, O(2)
TOTAL THEMES				26		
Cat5: Effective/ Ineffective of AOP in RMAF Current Practice (Q18)	Whether AOP is effective (E)/ ineffective (IE) in RMAF present practice	Q18. To what extent you are satisfied with the present RMAF's acquisition operational process. By referring to the acquisition operational process handed over to you earlier, do you want to add any comment on that process?	-Unorganized CSF in RMAF AOP, unclear process owner and separately discussed. -Unavailability of explicit process and process owner related to ILS and PPP in AOP.	(IE)23 (E)2 (O)-	(IE) 23/25 (92%) (E) 2/25 (8%) (O)-	<u>Avoid ad-hoc implementation:</u> - AOP in line with NDP. -Integrated of CSFs in acquisition. -explicit in-house AOP. <u>Explicit acquisition process & process owner</u> - To include ILS and PPP process flow in AOP. (IE)23, (E)2, (O) -
TOTAL THEMES				25		
Cat 6: Adequacy/ inadequacy of performance measure in RMAF practice was measured by Q17, Q19.	Whether PM is inadequate (IA)/ Adequate (A) in current RMAF practice	Q17. In your opinion, do you think the performance measure in acquisition focused on aircraft availability is adequate? Do you want to elaborate further? Q19. To what extent you agree that, the measurement of aircraft availability will monitor the whole acquisition process? Do you want to add any comment?	-Inadequate. -Do not rely only on availability. Need to find a better performance measure.	(IA)19 (A)1 (O)1 (IA)20 (A)1 (O)1	(IA) 39/43 (90.7%) (A) 2/43 (4.65%) (O)2/43 (4.65%)	--Performance measurement shall have considered the whole acquisition process to disposal phase. -Agreement shall be registered as binding contract (IA)39, (A)2, (O)2
TOTAL THEMES				43		
Cat 7: Effective/ ineffective of LCC was measured by Q6, Q7.	Whether the LCC is effective (E)/ ineffective (IE)	Q6. In your opinion, do you think life cycle cost in RMAF acquisition has considered all cost involved? Do you want to add any comment? Q7. What do you think about the adequacy of life cycle cost implementation in RMAF acquisition practice? Do you want to add any comment?	Not calculate whole cost. Inadequate	(IE)24 (E)1 (O)1 (IE)23 (E)1 (O)1	(IE) 47/51 (92.16%) (E) 2/51 (3.92%) (O)2/51 (3.92%)	LCC to consider whole cost required in aircraft life cycle: ownership cost until the disposal cost. Maintenance & operation cost, mid-life review & upgrading cost, (IE)47, (E)2, (O)2
TOTAL THEMES				51		
Cat 8: Competency of RMAF Personnel Q12 and Q13.	Whether Competent (C)/ Required Improvement (RI) among personnel who involved in acquisition process.	Q12. What do you think about the competency of RMAF personnel involved in the acquisition process? Do you want to add any comment? Q13. In your opinion, what do you think about the competency of every department in RMAF acquisition process? Do you want to add any comment?	RMAF Level – Ok. They are committed. At RMAF Level – OK. Government programs to enhance good governance and attitude.	(P)25 (N)1 (O) - (P)25 (N)1 (O)-	(P) 50/52 (96.15%) (N) 2/52 (3.85%) (O) -	<u>Support from competence & high tech. MRO</u> - Concept phase industry involvement. - MRO competency. - competency to RMAF personnel. -Work together with industry in offset program (G) 50, (RI)2, (O)
TOTAL THEMES				52		

Measure Categories / Sub Categories (a)	Categories / Sub Categories Definition (b)	Questionnaires (c)	Answers (d)	No. of Repetitive Theme (e)	Repetitive Theme/ Total Themes (f)	Recommendations (Repetitive Themes) (g)
Cat 9: Governance in Acquisition was measured by Q20 and Q21	Whether good (G) / Require Improvement (RI) in RMAF aircraft acquisition	Q20. To what extent you agree that, all departments outside RMAF has practice good governance in RMAF aircraft acquisition process? Do you want to add any comment?	-Need further study to confirm actual situation, need enforcement, in doubt, and no comment.	(P)11 (N)12 (O)11	(P)21/60 (35%) (N)22/60 (36.67%)	- The implementation of 'work ethics', good governance practice and etc.
		Q21. To what extent you are satisfied with the governance of aircraft acquisition process which beyond the RMAF control? Do you want to add any comment?	-It is the government decision to buy or not to buy'. -In doubt.	(P)10 (N)10 (O) 6	(O) 17/60 (28.33%)	
(P)21, (N)22, (O) 17						
TOTAL THEME				60		
GRAND TOTAL THEME				520		

From Table 8, this project has adopted:

One Complete Theme = A combination of answer (d) and recommendation by the respondent (g).

*Answers (d) without recommendation (g) require further clarification from respondents.

There were 520 total themes, with 69 themes related to Cat 1: Effectiveness of ILS in RMAF Present Practice, 71 themes related to the effectiveness of the PPP ecosystem in the RMAF and the aerospace defence industry, 123 themes related to regulations and policy in RMAF's acquisition practices, 123 themes focusing on Cat 3: the effectiveness of AMF in the RMAF's current practices, 26 themes related to Cat 4: Effectiveness (E) of AMF in the RMAF's current practices, 25 themes focused on Cat 5: the effectiveness of AOP in RMAF's current practices, 43 themes related to Cat 6: Adequacy of performance measures, 51 themes focused on Cat 7: Effectiveness of LCC implementation in the RMAF, 52 themes related to Cat 8: competency of the RMAF personnel involved in the acquisition process, and 60 themes related to Cat 9: Measurement of governance in the RMAF's acquisition process.

Category One: 56 out of 69 themes (81.16%) showed the ineffectiveness (IE) of ILS in the RMAF's practices, while only 4/69 (5.797%) repetitive themes showed the effectiveness (E) of the ILS in the RMAF's practices and 9/69 (13.04%) themes were omitted as they are not related to the research. The respondents highlighted 56 repetitive themes as suggestions for further improvement of the ILS.

Category Two: 62 out of 71 themes (87.32%) indicated the ineffectiveness (IE) the of PPP ecosystem for the RMAF and the aerospace defence industry. Only 6/71 (8.45%) repetitive themes showed that PPP is effective (E) and 3/71 themes were omitted as they are not related to the research or have unclear clarification. The respondents highlighted 62 repetitive themes as suggestions to improve the PPP ecosystem for the RMAF and the aerospace defence industry.

Category Three: 112 out of 123 themes (91.06%) indicated the inadequacy (IA) of regulations, policy, and procedures related to the RMAF's current acquisition practices. Only 10/123 (8.13%) repetitive themes showed adequacy (A) and 1/123 theme was omitted as it is not related to the research and has unclear clarification. The respondents highlighted 112 themes (with some of the themes repetitively highlighted) as suggestions to improve regulation and policy, especially on aircraft spares manufacturing by the local industry.

Category Four: 23 out of 26 themes (88.46%) indicated ineffectiveness (IE) of the AMF due to the ad hoc basis of its implementation. Only 1/26 (3.85%) theme is effective (E) (ad hoc AMF) and 2/26 themes were omitted as they are not related to the research or have unclear clarification. The respondents highlighted 23 themes (with some of the themes repetitively highlighted) as recommendations to improve the AMF.

Category Five: 23 out of 25 themes (92%) indicated ineffectiveness (IE) of the AOP due to the unavailability of the ILS and PPP processes in the AOP. Only 2/25 (8%) themes showed effectiveness (E) of the present AOP, and no themes were omitted. The respondents highlighted 23 themes (with some of the themes repetitively

highlighted) for improvements which are focused on the development of the ILS and PPP processes in the RMAF's AOP.

Category Six: 23 out of 26 themes (88.46%) indicated ineffectiveness (IE) of the AMF due to the unavailability of AMF. Only 1/26 (3.85%) theme showed the effectiveness (E) of ad hoc AMF and 2/26 themes were omitted as they are not related to the research or have unclear clarification. The respondents highlighted 23 themes (with some of the themes repetitively highlighted) as recommendations to improve the AMF.

Category Seven: 47 out of 51 themes (92.16%) indicated ineffectiveness (IE) of the LCC implementation. Only 2/51 (3.92%) themes showed the effectiveness (E) of its implementation and 2/51 (3.92%) themes were omitted as they are not related to the research. The respondents highlighted 47 themes (with some of the themes repetitively highlighted) as recommendations for further improvement.

Category Eight: 50 out of 52 themes (96.15%) indicated good competency of the RMAF personnel who are involved in the acquisition process. Only 2/52 (3.85%) themes requested improvements in terms of competency, and no themes were omitted. The respondents highlighted 50 themes (with some of the themes repetitively highlighted) as recommendations for further improvement.

Category Nine: 21 out of 60 themes (35%) indicated good governance in the RMAF's acquisition process. 22/60 (36.67%) themes needed improvement on governance, especially in areas outside the RMAF's jurisdiction while 17 themes were omitted as they are not related to the research study or have unclear clarification. The respondents highlighted 21 themes (with some of the themes repetitively highlighted) as recommendations for further improvement. The relation between the questionnaires and survey results for the MG and the WG is shown in Table 9.

Table 9. The questionnaires and survey results between MG and WG and their relation

Categories / Sub categories (a)	Categories / Sub categories definition (b)	Question for WG related with the question for MG (c)	Survey results (WG) (d)	Question for MG related to WG (e)	Interview results (MG) repetitive themes/ total themes (f)
Cat 1 : Effectiveness (E) of ILS in RMAF	Whether ILS is effective (E)/ ineffective (IE) in RMAF practice	Q1, Q2, Q3, Q4, Q10, Q14, Q15, Q16	IE >97% either S/A or A	Q1, Q3, Q5	(IE) 56/69 (81.16%) (E) 4/69 (5.797%) (O) 9/69 (13.04%)
Category 2: Effectiveness of PPP ecosystem for RMAF and aerospace defence industry	Whether ecosystem for PPP is effective (E)/ ineffective (IE)	Q7, Q8, Q11, Q12	IE > 94% either S/A or A	Q8, Q11, Q14	(IE)62/71 (87.32%) (E) 6/71 (8.45%) (O) 3/71 (4.23%)
Cat 3: Adequacy of regulations, policy, related to acquisition	Whether policies related to acquisition are adequate (A)/ inadequate (IA)	Q5, Q9	IA > 85% either S/A or A	Q2, Q4, Q9, Q10, Q15	(IA) 112/123 (91.06%) (A) 10/123 (8.13%) (O) 1/123 (0.813%)
Cat 4: Effectiveness (E) of AMF in RMAF	Whether AMF is effective (E)/ ineffective (IE)	Not measured. Only for MG	-	(Q16)	(IE) 23/26 (88.46 %) (E) 1/26 (3.85%) (O) 2/26 (7.69%)
Cat5: Effectiveness of AOP in RMAF present practice	Whether AOP is effective (E)/ ineffective (IE)	Not measured. Only for MG	-	(Q18)	(IE) 23/25 (92%) (E) 2/25 (8%) (O)-
Cat 6: Adequacy of performance measure	Whether PM is inadequate (IA)/ Adequate (A)	Not measured. Only for MG	-	Q17, Q19	(IA) 39/43 (90.7%) (A) 2/43 (4.65%) (O)2/43 (4.65%)
Cat 7: Effectiveness of LCC implementation.	Whether the LCC implementation is effective (E)/ ineffective (IE)	Not measured. Only for MG	-	Q6, Q7	(IE) 47/51 (92.16%) (E) 2/51 (3.92%) (O)2/51 (3.92%)
Cat 8: Competency of RMAF personnel	Whether competent (C) / require improvement (RI) among personnel involved in acquisition process	Q6, Q13	C > 93% either S/A or A	Q12, Q13	(C) 50/52 (96.15%) (N) 2/52 (3.85%) (O) -
Cat 9: Governance in acquisition	Whether good (G)/required improvement (RI) in governance for RMAF aircraft acquisition.	Not measured. Only for MG	-	Q20, Q21	(G) 21/60 (35%) (RI) 22/60 (36.67%) (O) 17 (28.33%)

Note. S/A = Strongly Agreed, A = Agreed, C=High competency, RI= required improvement, Cat = Category, Q=Question, G= Good governance.

Table 9 shows the measurements for Category One: Effectiveness (E) of the ILS in the RMAF which are Q1, Q2, Q3, Q4, Q10, Q14, Q15, and Q16, and these questions are related to the MG's interview questions (Q1, Q3, Q5). The results showed that more than 97% (>97%) of WG respondents had either "strongly agree" or "agree", "always", and "most of the time" ad answers, indicating that the ILS in the RMAF is ineffective. The results from the WG are similar to the MG with more than 81% out of 69 total themes indicating the ILS'

ineffectiveness in the RMAF.

Measurements for Category Two: The effectiveness of the PPP ecosystem for the RMAF and aerospace defence industry was evaluated using Q7, Q8, Q11, and Q12 for the WG and these questions are related to Q8, Q11, and Q14 of the MG's interview questions. The results showed that more than 94% of the WG respondents had either "strongly agree" or "agree" that the PPP ecosystem for the RMAF and the aerospace defence industry was ineffective. Similar results were obtained from the MG with more than 87% of the themes out of 71 total themes indicating the ineffectiveness of the PPP ecosystem.

Measurements for Category Three: The adequacy of regulations, policy, and procedures related to acquisition was evaluated using Q5 and Q9 for the WG, and these questions are related to Q2, Q4, Q9, Q10, and Q15 for the MG. The results showed that more than 94% of the WG respondents had either "strongly agree" or "agree" for the inadequacy of regulations, policy, and procedures related to acquisition. Similar results were obtained from the MG with more than 91% out of 123 total themes indicating the inadequacy of regulations, policy, and procedures to support the RMAF's acquisition process. This part had focused more on regulations and policies in the local aircraft spares manufacturing industry.

Measurement for Category Four: The effectiveness of the acquisition management framework (AMF) in current RMAF practices was evaluated using only Q16 for the MG. The results showed that more than 88% out of the 26 themes indicated the AMF's ineffectiveness.

Measurement for Category Five: The effectiveness of the AOP in the RMAF's practices was only evaluated using Q18. 92% out of 25 themes showed ineffectiveness of the AOP in the RMAF's practices.

Measurements for Category Six: The adequacy of performance measures used in the RMAF was evaluated using Q17 and Q19 for the MG. The results showed that more than 90% of the 43 themes indicated inadequacy of performance measures.

Measurements for Category Seven: The effectiveness of the LCC implementation in the RMAF was evaluated using Q6 and Q7 for the MG. The results showed that more than 92% out of 51 themes indicated the ineffectiveness of the LCC implementation.

Measurements for Category Eight: The competency of RMAF personnel in acquisition was evaluated using Q6 and Q13 for the WG, and these questions are related to Q12 and Q13 for the MG. The results showed that more than 93% of WG respondents had either "strongly agree" or "agree" that RMAF personnel with high competency are involved in the maintenance and acquisition process. Similar results from the MG showed that more than 96% out of 52 total themes indicated the high competency of RMAF personnel in the acquisition process.

Measurements for Category Nine: Governance in the acquisition process was evaluated using Q20 and Q21 for the MG. The results showed that 35% out of 60 themes indicated that the RMAF has practiced good governance in aircraft acquisition. However, more than 36% suggested improvement of governance. There were consistent themes mentioned by the MG which focused on the importance of good governance and competency in acquisition.

3.2.3 Case Study Results - Elements Associated to Acquisition

There are 6 elements associated to acquisition from the case study results:

a. RMAF to develop and/or revise supporting regulations and policy: focus on spares manufacturing by the local industry, managing obsolescence, improving pre-delivery and final acceptance test (made available before aircraft enters into service), choosing a specific timeframe for aircraft mid – life review, smart partnerships with the industry, ILS, AOP and developing an explicit acquisition management framework. The AMF from MOF needs to be tailored to the RMAF's specific requirements and a checklist should be provided along with a timeframe for every action. The process owner is the MPOU-Project Team. It was also highlighted that all regulations and policies must be issued early in the acquisition stage and an agreement should be included as a binding contract.

b. Requirement of explicit PPP process flow & process owner: It was highlighted that the Defence Industry Department (DID) and MIGHT has proposed a PPP ecosystem to the MoF for approval. The owner of the PPP process flow is the MPOU office in collaboration with the engineering department (secretariat) which may advise the members of the working group (KK) Aero.

c. Avoid ad-hoc implementation: Repetitive suggestions from the case study to avoid ad-hoc acquisition process. Furthermore, the acquisition operational process (AOP) has to be in line with the National Defence

Policy. The AOP must integrate all CSFs in acquisition with explicit in-house processes to include ILS and PPP in the process flow. Reorganize the ILS framework to include the ILS’ ten principles and ILS ten supporting elements, and the development of the ILS process by the project Team (ILS Manager) at MINDEF’s MPOU and Material Department. ILS needs to be started early in the acquisition phase and should be ready for at least 2 years before an aircraft enters into service (EIS).

d. RMAF’s preparedness for ILS, ToT and innovation in offset programs: The RMAF together with the industry should be involved in offset programs starting from the concept phase.

e. Support from competence and high technology MRO: MRO and RMAF personnel to upgrade competency and work together in offset programs.

f. Explicit acquisition process and process owner: to have explicit AOP with ILS and PPP process, along with the integration of CSFs. Good governance practices at all levels in handling the acquisition process. In addition, performance measurements are required throughout the whole acquisition process. Furthermore, all agreements must be in the form of binding contracts.

Based on the results from the survey and case study interviews, the preliminary ACF I was modified to ACF II as shown in Figure 4.

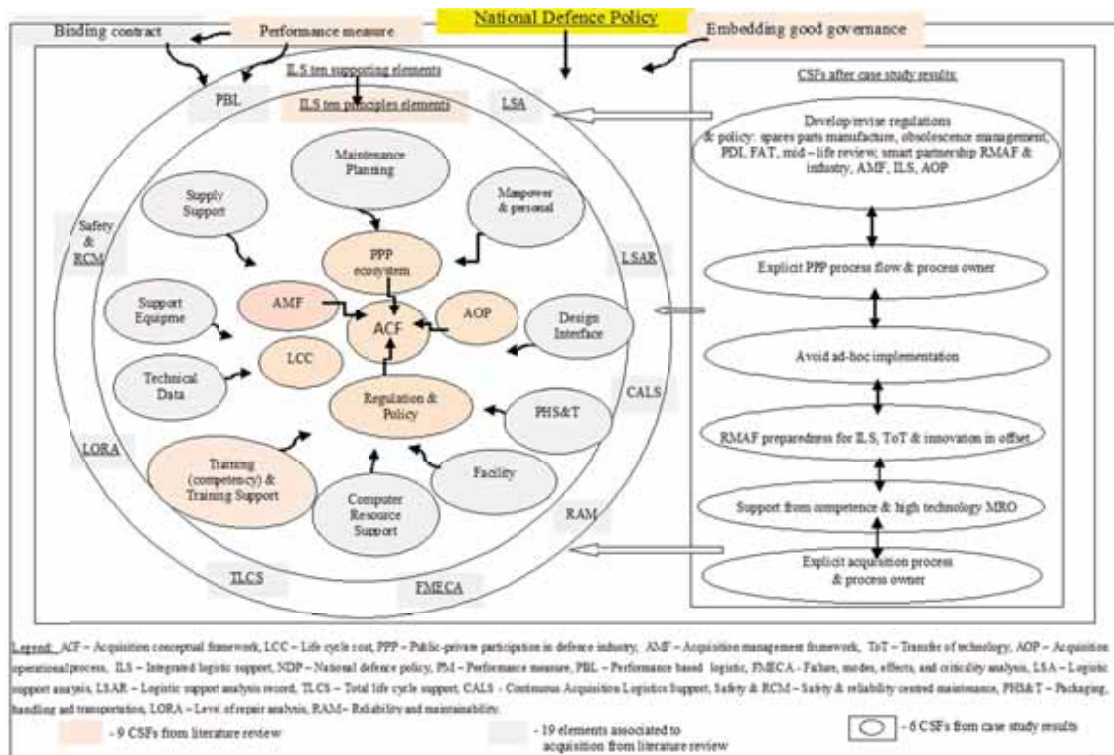


Figure 4. Acquisition conceptual framework (ACF II)

Figure 4 shows ACF II that was developed from the 9 CSFs and 19 elements associated to acquisition as suggested by the literature review conducted and the 6 CSFs obtained from the case study results. It showed that the case study results are in line with findings from the literature review. ACF II was subjected to experts’ validation to be modified to ACF III (final).

3.3 Acquisition Conceptual Framework (ACF II) Validation Results

ACF II was validated by four experts comprising of two senior officers and two senior managers from the aviation industry. Letters were sent to request the experts’ validation and the results were recorded. The validation results were in line with findings from the literature review and the case study. The additional 5 elements associated to acquisition are as the following:

a. Require explicit regulations and policy for: spare parts manufacturing by local companies, self-reliance concept, obsolescence management, mid – life review, smart partnership with industry (e.g. RMAF’s technician attached to Airod Sdn Bhd Subang for C 130 and Nuri aircraft second line servicing).

- b. Concept phase with industry involvement under the win-win situation concept. Regulations and policy should encourage industry's early involvement in the acquisition process, but they should not directly participate in the acquisition strategy development e.g. technical representative from Sepang Aerospace Engineering (SAE) (A400M field service representative) attended A400M EASA course in Spain together with RMAF's technical personnel). However, it was expected that local companies should participate much earlier than that.
- c. Fair chance for the industry to participate. Do not focus only on the five core companies e.g. Airod Sdn Bhd, Zetro Services Sdn Bhd, ATSC, Destini Prima Sdn Bhd, and Sapura Sdn Bhd.
- d. Industry preparedness. Local MROs need to acquire competencies through the transfer of technology from offset programs e.g. Airod Sdn Bhd personnel were attached to No. 22 Squadron (A400M aircraft) to learn maintenance concepts. However, discussion with OEM on who is going to be the MRO is still in the pipeline. The industry requires more offset programs in order to gain knowledge and prepare for self-reliance.
- e. Priority to local companies. It was highlighted that priority should be given to local companies rather than OEM to participate as MRO e.g. second line servicing for EC 725 aircraft was awarded to local company namely BHICAS. Presently, BHICAS successfully carried out a 1000 hours check for four EC 725s.

Four experts consisting of two senior officers and two industrial practitioners had validated ACF II, which was developed from the literature and case study results. ACF II was modified based on the validation results, and the final ACF III was proposed for implementation. ACF III consists of 9 CSFs and 19 elements associated with acquisition (recommended from literature review), 6 elements from case study results and 5 elements from validation results. Altogether, 39 CSFs were integrated in ACF III as shown in Figure 5.

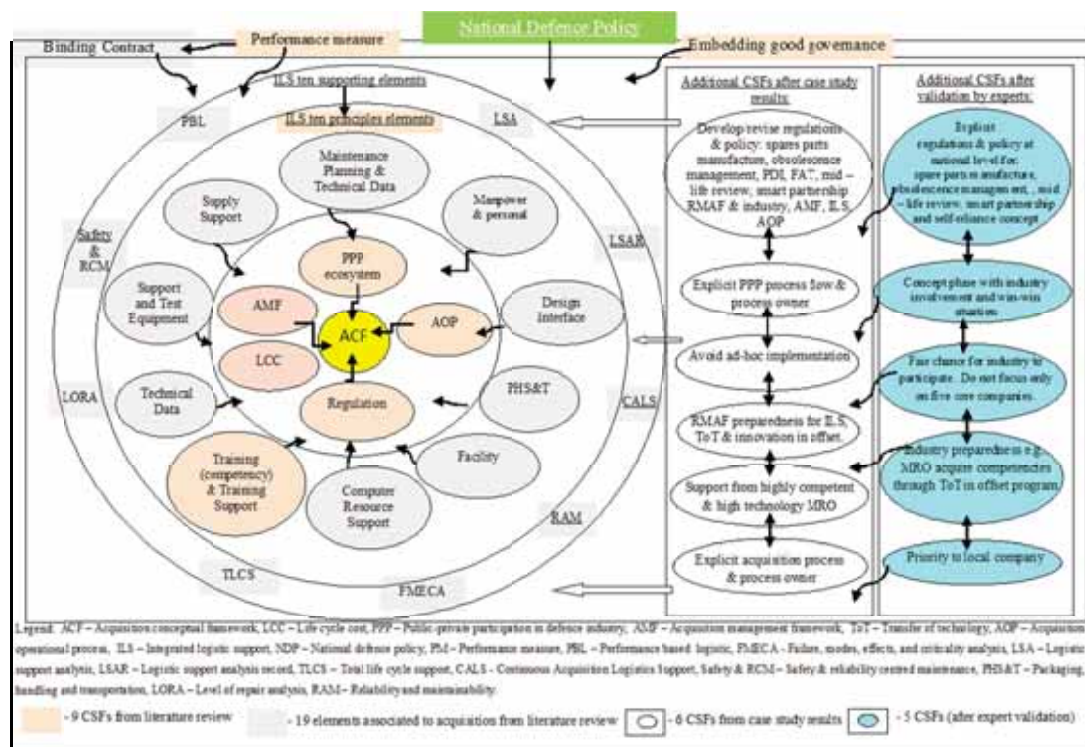


Figure 5. Acquisition conceptual framework (ACF III)

The recommended ACF III was developed from 9 CSFs in acquisition and 30 elements associated to acquisition (19 elements from literature review, 6 elements from case study results, and 5 elements from validation results).

4. Discussion

The aim of this section is to answer the problem statement which is “why” and “how” the aircraft in the RMAF fleet can achieve and sustain at least 70 % of availability (Av). “What” is the recommended ACF that suits the RMAF’s requirements and help ensure higher aircraft Av? The conclusion is based on the literature review, direct observations, comparison with literature, practices by the Malaysian public sector, sister services (Royal Malaysian Navy and Royal Malaysian Army), DoD USA, MoD UK, Australian Defence Force (ADF), and the survey and interview results from the case study.

The RMAF's Present Practices in Comparison with Literature, Malaysian public sector, RMN, RMA, DOD USA, MOD UK and ADF

The comparison is shown in Table 10.

Table 10. RMAF's present practices in comparison with literature, RMN, RMA, Malaysian public sectors, DoD USA, MoD UK and ADF

Case Study	ILS	PPP	Reg	AMF	AOP	PM	Cost	Comp	Gd Gov
Observation in RMAF	√	Not clearly specified/Ad-hoc. Local industries capability was relatively far behind if compared to DoD USA, MoD UK, and ADF. The Malaysia Defence Security Report Q4 supported this observation (2011).							
Literature Review	√ -Use the term Logistics Support, Supply Change Management -Limited discussion on ILS. -Focused on: LCC or Cost, VFM	√	√	√ Limited	√ Limited	√ Variant: LCC, Cost, VFM and etc	√ Almost all literature discusses about LCC/ Cost, VFM	√	√ One of CSF in ACF
The integration among CSFs in literature was unclear and separately discussed in different topics.									
DoD USA	√ ILS in early acquisition process and thru capability life cycle. (DOD Directive Number 5000.39)	√ Organic and Contractor Logistics Support (CSL)	√ Explicit	√ Explicit	√ Explicit	√ PBL or known as PBC	√ Life Cycle Cost	√	√
Supported by high technology industry in acquisition. CSFs have been practiced by DoD USA,									
MoD UK	√ ILS in early acquisition process and thru life cycle. (UK MOD - The Acquisition Handbook 2014)	√ Organic and Contractor Logistics Support (CSL)	√ Explicit	√ Explicit	√ Explicit	√ PBL or known as PBC	√ Life Cycle Cost	√	√
Supported by high technology industry in acquisition. CSFs have been practiced by DoD USA, MoD UK and ADF with differences in terms of in-house processes.									
ADF	√ ILS in early acquisition process and thru capability life cycle. (AAP 1001.4, (AAP 1001.4, 2012)	√ Australia Industry Capability Program (AIC) where feasible (AAP1001.4 , pg 50-52; (Defense White Paper 2009)	√ Explicit	√ Explicit	√ Explicit	√ PBL or known as PBC	√ Life Cycle Cost	√	√
Supported by high technology industry in acquisition. CSFs have been practiced by DoD USA,									
Public Sectors in Malaysia	√ Sustainable Supply of Goods & Services, Cost & Quality Base - High VFM "The Red Book" (2006)	√ Promote local Industries to achieve National Development Plans	√ In-adequacy /In-explicit i.e. Produces pare locally	√ In-explicit	√ In-explicit	√ Cost and Value for Money	√ Cost	√ - Very limited and generic discussion in ACF	√ - Very limited and generic discussion in ACF
Not clearly specify. Local industries capability relatively far behind if compared to the DoD USA, MoD UK, and ADF (Malaysia Defence Security Report Q4, 2011)									
Royal Malaysian Army	√ ILS 10 Principles Element RMA Directive (19 July 1995).	√ Promote Local Industries to achieve National Development Plans and Defense Policy (2010)	√ In-adequacy / In-explicit i.e. Produce spare locally	√ Un-available	√ Inexplicit	√ Focused on Aircraft Availability.	√ Limited to Cost of ownership	√	√
Not clearly specify. Local industries capability relatively far behind if compared to the DoD USA, MoD UK, and ADF (Malaysia Defence Security Report Q4, 2011)									

Case Study	ILS	PPP	Reg	AMF	AOP	PM	Cost	Comp	Gd Gov
Royal Malaysian Navy	√	√	√	√	√	√	√	√	√
	ILS 10 Principles Element (RMN Directive (17 July 1995).	Promote Local Industries to achieve National Development (NDP) Plans and Defense Policy (2010)	In-adequacy /In-explicit i.e. Produce spare parts locally.	Unavailable	Inexplicit	Focused on Aircraft Availability.	Limited to Cost of ownership		
				Not clearly specify. Local industries capability relatively far behind if compared to the DoD USA, MoD UK, and ADF (Malaysia Defence Security Report Q4, 2011)					
Royal Malaysian Air Force	√	√	√	√	√	√	√	√	√
	RMAF HQ, Directive (2016) - Unorganized ILS. - Ad Hoc Basis. - Unclear process and process owner	Contractorization Program in 1998 NDP (2010). Limited PPP (five pillars industries) -Unorganize/ Ad-hoc- Unclear process.	In-explicit/un-available /revision /develop i.e. Produce spare locally..	Un-available specific AMF that tailored to the RMAF and industry capability	Unavailable of ILS and PPP process, unclear process owner	Focused on Aircraft Av.	Limited to Cost of ownership and two to three years' in-service support.		
				Not clearly specify. Local industries capability was relatively far behind if compared to the DoD USA, MoD UK, and ADF (Malaysia Defence Security Report Q4, 2011)					

Note. VFM = Value for Money, PBL = Performance Based Logistic, PBC = Performance Based Contract, AAP = Australian Air Publication, CSF= Critical Success Factor, ACF = Acquisition Conceptual Framework, Comp = Competency of personnel, Gd Gov = Good governance in acquisition, and PM = Performance Measure.

4.1 Major Findings

There were three major findings:

Conclusion 1: RMAF has not achieved and sustained at least 70% aircraft Av as its desired objective due to high aircraft downtime waiting for spares at RMAF facilities (AWP), and waiting for spares at second line or contractor facilities (CONT). The percentage of three aircraft Av from year 2011 to 2015: Type A, Type B and Type C is approximately 43% which is far from the targeted 70% Av. Aircraft downtime is due to AWP (23.5%) and CONT (25%) which exceed the target of 10% or below. Downtime due to in-work by technician (IWRK) is below 10% and within the target limits. As such, reducing or eliminating the AWP and CONT ensures higher aircraft availability. This answers Research Question One on why RMAF has not achieved and sustained at least 70% of aircraft availability.

Conclusion 2: Weaknesses in the RMAF’s present acquisition conceptual framework (ACF) have caused ineffectiveness and inefficiency of through life cycle support (TLCS) and it has given a significant impact to aircraft Av in terms of higher aircraft downtime due to AWP and CONT. The weaknesses in the RMAF’s present practices are related to the critical success factors (CSFs) in ACF. Hence, based on the literature review, observation in the field and case studies results, this research has identified CSFs in ACF. These CSFs are integrated logistics support (ILS), ecosystem for public-private participation (PPP) in aerospace defence industry, support regulations and policy related to aircraft acquisition, acquisition operational process (AOP), life cycle cost (LCC), performance measurement (PM), acquisition management framework (AMF), competency of the RMAF personnel involved in the acquisition process, and good governance. There are 30 elements associated to acquisition. The 19 elements taken from literature are performance based logistics (PBL), safety & reliability centered maintenance (Safety & RCM), failure mode, effect and criticality analysis (FMECA), logistics support analysis (LSA), logistics support analysis record (LSAR), computer aided logistics support (CALs), reliability, availability and maintainability (RAM), total life cycle support (TLCS), and level of repair analysis (LORA). In addition, the literature had also highlighted the importance of maintenance planning, technical data, manpower and personal, supply support, support and test equipment, computer resource support, facility, packaging handling storage and transportation (PHS&T) e.g. NATO standards PHS&T, design interface, and binding contracts. 6 elements from the case study results consist of: development/revision of regulations and policy in spares parts manufacture, obsolescence management, pre-delivery inspection (PDI), final acceptance test (FAT), mid – life review, smart partnership RMAF and industry, acquisition management framework (AMF), integrated logistics support (ILS), and acquisition operational process (AOP). Furthermore, acquisition requires explicit public-private participation process flow and process owner, to avoid ad-hoc implementation, preparedness: for ILS, transfer of technology (ToT) and innovation through offset program, high competency and advance technology maintenance repair and overhaul (MRO), and supported through explicit acquisition process and process owner. 5 elements from validation results consist of: explicit regulations and policy at national level for spare parts manufacture, obsolescence management, mid – life review, smart partnership and self-reliance

concept. Furthermore, the industry's early involvement in the acquisition process (concept phase) under the win-win situation concept, a fair chance for the industry to participate and do not focus only on five core companies, industry preparedness e.g. MRO acquire competencies through ToT in offset programs and priority given to local companies to participate rather than to OEM or overseas vendors. By successfully identifying the areas of improvement in the RMAF's present practices, this research finding has answered Research Question Two: How has the RMAF's present practices given a significant impact to aircraft availability. The areas of concern in the present ACF are as follows:

a. The present ILS with ten principle elements and ten supporting elements in the RMAF is not organized and has limited applicability. It was on an ad hoc basis with an unclear process and process owner. b.

Even though the ecosystem for PPP in the aerospace defence industry is available, it is not organized with an unclear process and process owner, and is practiced on an ad hoc basis. There is limited PPP in aircraft maintenance activities with focus on the industry's core companies: Airod Sdn Bhd, Destini Prima Sdn Bhd, Sapura Sdn Bhd, ATSC Sdn Bhd, and Zetro Services Sdn Bhd. Other industry players have limited opportunity to contribute.

c. RMAF does not have a specific AMF tailored to its specific requirements in-line with the local industry's capability. These findings were further supported by interview results with the management group.

d. There are unclear regulations at the national level focusing on spare parts manufacturing by the local industry along with the unavailability or inadequacy of policies to support the aircraft acquisition process.

e. AOP is made available, but there is no process and unclear process owner for the ILS and PPP processes in the AOP. This situation has contributed to areas of concern in ILS and PPP for the aerospace defence industry throughout the acquisition process.

f. Performance measures are focused on aircraft availability during the operational phase rather than performance based logistics or performance based contract throughout the whole aircraft's life cycle.

g. There is limited discussion on LCC calculations. Normally, calculation of cost is limited to the cost of ownership with additional two to three years in-service support contract. Subsequent support is normally based on ad hoc basis.

h. Governance within the RMAF must be well disseminated and understood so that the acquisition process can be carried out efficiently.

Conclusion 3: The acquisition frameworks used by the DoD USA, MoD UK, and ADF are not suitable for the RMAF because they are supported by advanced technology industries compared to Malaysia where the aviation industry is still in the infant stage. The RMAF needs to have its own ACF to suit its unique military requirements (e.g. robust operations, risky flying areas and etc) and to be compatible to the local industry's capability in the present ecosystem. The present ACF in the RMAF is not organized as it is ad hoc with unclear process and process owner. It needs to be reorganized through integration with the identified 9 CSFs and 30 elements associated with acquisition as shown in Figure 5. Improvement in ACF through proper implementation can reduce aircraft downtime due to AWP and CONT. By successfully identifying the CSFs and integrating all of them in ACF III for implementation, this research finding has answered Research Question Three: What is the recommended acquisition conceptual framework that suits the RMAF and helps in ensuring high aircraft availability?

4.2 Research Contributions

The project under study is expected to close the gaps, provide a TLCS, deliver the following results and help in achieving and sustaining of at least 70% aircraft Av at all times:

- a. Successfully identify the cause of why the RMAF has not achieved aircraft availability as its desired objective.
- b. Successfully identify the RMAF's present acquisition practices and its significant impact to aircraft availability.
- c. Successfully propose an aircraft acquisition conceptual framework that suits the RMAF and helps in ensuring high aircraft availability

4.3 Recommendation for Future Work

This study had focused on military aircraft in the RMAF. Therefore, the application of study results on other

weapon systems, civil aviation aircraft or other sectors might be limited and require further research.

5. Summary

The RMAF has had difficulties in achieving and sustaining its aircraft Av as its desired objectives due to high aircraft downtime waiting for spares at the RMAF facilities and waiting for spares at the second line or contractor facilities. Weaknesses in the acquisition conceptual framework have caused ineffectiveness and inefficiency in the aircraft's through life cycle support and has given a significant impact to aircraft availability. An effective and efficient acquisition conceptual framework to suit the RMAF's unique requirements e.g. robust equipment was achieved through the integration of 9 critical success factors and 30 elements associated to acquisition. The 9 CSFs in acquisition consist of integrated logistics support, a healthy ecosystem for public-private participation in aerospace defence industry, a clear acquisition management framework, explicit regulations, policy and procedures (especially on spare manufacturing by local industries), a clear acquisition operational process, performance based logistics contract, and competency of personnel and good governance in acquisition process. Those CSFa ensure the aircraft Through Life Cycle Support, lower percentage of aircraft downtime, high percentage of availability as per the RMAF's desired objective. 30 elements associated to acquisition consist of PBL, RCM, FMECA, LSA, LSAR, CALS, RAM, TLCS, LORA, maintenance planning, technical data, manpower & personal, supply support, support & test equipment, computer resource support, facility, PHS&T, design interface and binding contract. All agreements must be in the form of binding contracts. The findings answered the problem statement of why the aircraft in the RMAF fleet has yet to achieve and sustain at least 70% of availability from the total aircraft in inventory. An effective acquisition conceptual framework ensures higher aircraft availability and helps in RMAF readiness to support the six basic principles of the Malaysian Defence Policy which are the capability for self-reliance, supporting the United Nations in peacekeeping, commitment to the Five Countries Defence Policy, steps taken on terrorism, defence diplomacy, and total defence in achieving the main objective to protect and defend the interests that are core to the country's sovereignty, territorial integrity and economic prosperity.

Acknowledgments

I would like to express my deep appreciation to the following people: First, many thanks to Lieutenant Colonel Samsuri bin Abu Bakar, the Head of Structure and Aerodynamics, Central Aerospace Engineering Services Establishment, Royal Malaysian Air Force. I also thank all Technical and Material staff who were involved during the planning stage of this project. My special gratitude goes to Professor Madya Dr. Abdul Rahman bin Abdul Rahim for his invaluable guidance. I appreciate all of their efforts which had motivated me to complete this project.

References

- Ayhan, B., & Üstüner, Y., (2015). Governance in public procurement: the reform of Turkey's public procurement system. *International Review of Administrative Sciences*. DOI:10.1177/0020852314548153
- Aldebert, B., & Rouzies, A., (2014). What role for mixed methods in the French management research? *International Management*, 19(1), 43-60.
- Aguado-Romero, J., Manuel, A., Lo'pez-Herna'ndez, & Vera-Ri'os, S., (2013). Auditing defence procurement contracts in the European context: An inter-country analysis. *International Review of Administrative Sciences*, 79(4), 659-680. DOI:10.1177/0020852313502155
- Alinaitwe, H., and Ayesiga, R. (2013). Success Factors for the Implementation of Public-Private Partnerships in the Construction Industry in Uganda. *Journal of Construction in Developing Countries*. 18(2), 1-14.
- Abd Rahman bin Abdul Rahim, & Nabi Baskh M. S. (2003). Case Study Method for New Product Development in Engineer-to-order Organizations. *Work Study*, 52(1), 25-36.
- Australian Defence Force Capability Development Handbook (2012). Director Skilling, Knowledge, Improvement and Policy. Capability Development Group, PO Box 7905, Canberra Bc Act 2610. Australia: Australian Defence Force.
- Bellais, R. (2014). *Public-private partnerships and the transformation of defence investment in the evolving boundaries of defence: An assessment of recent shifts in defence activities*. Published online: 08 Oct 2014; 25-49 c2.4.2
- Burgess, K., & Balakrishnan, K. (2014). Challenges in matching performance metrics to defence acquisition. *IJDAM*, 6, 66-77.
- Bowyer, D., & Davis, G. (2012). How to acquire aircraft? A grounded theory approach to case study research. *Qualitative research in accounting and management*, 9(4), 363-397.

- Bhattacharjee, A. (2012). *Social science research: principles, methods and practices* (2nd ed). PHD, University of South Florida.
- Bowen, G. A. (2008). *Naturalistic Inquiry and Saturation Concept: A Research Note*. 8(1) 137-152. London: Sage Publications.
- Beesly, L. R. (1966). Some Aspects of Military Aircraft Procurement. *Aircraft Engineering and Aerospace Technology*. 38(10), 26-36.
- Chad, D., & Stephen, H. (2015). A conceptual framework for defence acquisition decision makers. *Defence acquisition research journal: A publication of the Defense Acquisition University*, 21(1), 485-504.
- Caldwell, N., & Howard, M., (2014). Contracting for complex performance in markets of few buyers and sellers: The case of military procurement. *International Journal of Operations & Production Management*, 34(2), 270-294.
- Cheung, E., Chan, A. P. C., & Kajewski, S. (2010). Suitability of Procuring Large Public Works by PPP in Hong Kong. *Engineering, Construction and Architectural Management*. 17(3), 292-308.
- Crotts, J. C., Pan, B., & Raschid, A. E. (2008). Research in brief - A survey method for identifying key drivers of guest delight. *International Journal of Contemporary Hospitality Management*, 20(4), 462-470. DOI:10.1108/09596110810873552
- Durugbo, C., & Erkoyuncu, J. A. (2016). Mitigating uncertainty for industrial service operations: A multi case study. *International Journal of Operations & Production Management*, 36(5), 532-571.
- Dauids, C., Beeres, R., Paul C., & Fenema, V. (2013). Operational defense sourcing: Organizing military logistics in Afghanistan. *International Journal of Physical Distribution & Logistics Management*, 43(2), 116-133
- Delano, K. J. (1999). *Critical Success Factors for DoD Program Managers*. Thesis. Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama.
- Eßig, M., Mohr, D., & Tandler, S. (2014). An expose - capacity - portfolio for defence supply chains - The case of the military airlifter A400M. <http://www.acquisitionjournal.org>. *International Journal of Defense Acquisition Management (IJDAM)*, 6(2014), 1-20.
- Euske, K. J., Miguel, J. S., & Wang, C. (2012). How does the cost performance of defense contracts vary among services and contractors? Evidence from Major Defense Acquisition Programs (MDAP). In M. J. Epstein, & J. Y. Lee (Eds.), *Advances in Management Accounting* (Vol. 20, pp. 75-100). Emerald Group Publishing Limited. [http://dx.doi.org/10.1108/S1474-7871\(2012\)0000020010](http://dx.doi.org/10.1108/S1474-7871(2012)0000020010).
- Ellis, L. (1994). *Research Methods in the Social Sciences*. USA: Wm. C. Brown Communications, Inc.
- Fielding, J. P. (1980). How Do Aircraft Break Down? Some Studies of Reliability Data Feedback. *Aircraft Engineering and Aerospace Technology*. 52(11), 15-19.
- Gaither III, C. C. (2014). Incorporating Market Based Decision Making Processes in Defence Acquisitions. *IJDAM*. 6(2014), 38-50.
- Glas, A., Hofmann, E., & Eßig, M. (2013). Performance-based logistics: A portfolio for contracting military supply. *International Journal of Physical Distribution & Logistics Management*, 43(2), 97-115.
- Salehi, K., & Golafshani, N. (2010). Using Mixed Methods in Research Studies: An Opportunity With the Challenges. *International Journal of Multiple Research Approaches*, 4(3), 186-191.
- Graham, G., & Hardaker, G. (1998). Defence Sector Procurement and Supply Chain Relationships. *Supply Chain Management: An International Journal*, 3(3), 142-148.
- Gregory, R. N. (1992). *The Impact of Life Cycle Cost on Procurement Decisions*, SAE Technical Paper. Doi:10.4271/920969.
- Hui, W. S., Othman, R., Omar, N. H., Rahman, R. A., & Haron, N. H. (2011). Procurement issues in Malaysia. *International Journal of Public Sector Management*, 24(6), 567-593.
- Humphries, A., & Wilding, R. (2004). Sustained Monopolistic Business Relationships. *European Journal of Marketing*, 38(1/2), 99-120.
- Ianakiev, G. (2014). Defence Offsets: Regulation and Impact on the Integration of the European Defence Equipment Market. In *The Evolving Boundaries of Defence: An Assessment of Recent Shifts in Defence Activities*.
- Juanita, M., Rendon Rene, & Rendon G. (2016). Procurement Fraud in the US Department of Defence. *Managerial Auditing Journal*, 31(6/7), 748-767.
- Jefferies, M., Brewer, G. J., & Gajendran, T. (2014). *Engineering, construction and architectural management*,

- 21(5), 465-80. Emerald Country of Publication: UK.
- Janes, J. (2001). On research – Survey research design. *Library High Tech.*, 19(4), 419-421. MCB University Press.
- Kevin M., Robert T., Allen, W., & Grigg, L. (2014). Performance Metrics Analysis for Aircraft Maintenance Process Control. *Journal of Quality in Maintenance Engineering*, 20(2), 122-134.
- Khotari, C. R. (2005). *Research Methodology-Methods and Techniques* (2nd revised ed.) New Delhi: New Age International (P) Limited, Publishers.
- Lavallee, T. M. (2010). Bulletin of Science. *Technology & Society*, 30(3), 185-194.
- Likert, R. (1932). A Technique for Measurement of Attitudes. *Archives of Psychology*, 21(40).
- Maxim, P. S. (1999). *Quantitative Research Methods in the Social Sciences*. New York: Oxford University Press, Inc.
- Miller, A., & Ray, J. L. (2015). Moving from best practices to standard practices in defense acquisition. *Defense Acquisition Research Journal: A Publication of the Defense Acquisition University*, 22(1), 64-82.
- MoD UK JSP 886 (2012). Integrated Logistic Support Policy. Volume 7, Part 1, Version 2.4. United Kingdom: MoD.
- MoD UK JSP 886 (2014). Integrated Logistic Support Policy. Chapter 3, Volume 7, Part 1, Version 2.6. United Kingdom: MoD.
- Mohammad Reza Mohammadi (2013). Ranking of Critical Success Factors of e-procurement in Iranian Automotive Industry. *International Research Journal of Applied and Basic Sciences*, 4(12), 3910-3918.
- Parida, A., Kumar, U., Galar, D., & Stenström, C. (2015). Performance Measurement and Management for Maintenance: A Literature Review. *Journal of Quality in Maintenance Engineering*, 21(1), 2-33.
- Perez, M., Urbina, L. S., Damiani J. H. S. (2009). *Acquisition and Development Methodology of Aircraft, Systems and Materials of the Brazilian Air Force*. Management of Engineering & Technology (MET), 2009. PICMET 2009 Proceedings, August 2-6, Portland, Oregon USA: PICMET.
- PeriyarSelvam, U., Tamilselvan, T., Thilakan, S., and Shanmugaraja, M. (2013). Analysis on Costs for Aircraft Maintenance. *Advances in Aerospace Science and Applications* (2013), 3(3), 177-182.
- Pryor, W. E., & M. B. E. (1964). Reliability and Performance of Aircraft Transparencies in Military Service. *Aircraft Engineering and Aerospace Technology*, 36(12), 386-402.
- Ribeiro, C. G., & Furtado A. T. (2014). *Science, Technology & Society*, 19(2), 161-197.
- Rosen, S., G. (2013). *Defense Acquisition Research Journal: A Publication of the Defense Acquisition University*, 20(3), 261-282.
- Rutner, S. M., Aviles, M., & Cox, S. (2012). Logistics Evolution: A Comparison of Military and Commercial Logistics Thought. *The International Journal of Logistics Management*, 23(1), 96-118.
- Rong, Z., Yunxiang, C., & Chungrong, H. (2010). Acquisition Strategy of Complicated Equipment Based on Optimization Theory. ICEEE: E-Product, E-Service and E-Entertainment. 7-9 Nov 2010. Henan, China: 1, 227- 230.
- Raymond, J. (2008). Benchmarking in Public Procurement. *Benchmarking: An International Journal*. 15(6), 782-793. <http://dx.doi.org/10.1108/14635770810915940>
- RMAF HQ PU 2102 (2012). RMAF Engineering Organization Quality Manual Clause 5.4.1c. Malaysia: RMAF.
- RMAF HQ PU 2302 (2012). Engineering Organization Procedure Manual: The Planning of the Engineering Organization Resources. Malaysia: RMAF.
- Starr, M. A. (2014). Qualitative and Mixed-Methods Research In Economics: Surprising Growth, Promising Future. *Journal of Economic Surveys*, 28(2), 238-264.
- Sokri, A. (2014). *Life Cycle Costing of Military Equipment*. Proceedings of the International Conference of Control, Dynamic Systems, and Robotics. 15-16 May 2014. Ottawa, Ontario, Canada, Paper No. 45
- Schwartz, M. (2013). *Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process*. Congressional Research Service. USA: 1 - 16.
- Stewart, J., & Ablong, T. (2013). When Australian Defence Procurement Goes Wrong: Improving Outcomes in a Troubled Contractual Environment. *The Economic and Labour Relations Review*. Non - Symposium Article. UK: Sage Publication.
- Sekaran, U., & Bougie, R. (2009). *Research Methods for Business, A Skill Building Approach* (5th ed.). USA: John Wiley and Sons, Ltd, Publication.

- Samaranayake, P., Lewis G. S., Woxvold E. R. A., & Toncich, D. (2002). Development of Engineering Structures for Scheduling and Control of Aircraft Maintenance. *International Journal of Operations & Production Management*, 22(8), 843-867.
- Salant, P., & Dillman, D. A. (1994). *How to Conduct Your Own Survey?* USA: John Wiley & Sons Inc.
- Tashakkori, A., & Teddlie, C. (Eds.) (2010). *Sage Handbook of Mixed Methods in Social & Behavioral Research* (2nd ed.) Thousand Oaks, CA: Sage Publications.
- Terry, D. Moore Alan, W., Johnson Michael, T., Rehg Michael J., & Hicks (2007). Quality assurance staffing impacts in military aircraft maintenance units. *Journal of Quality in Maintenance Engineering*, 13(1), 33-48.
- Umar Al-Turki (2011). A Framework for Strategic Planning in Maintenance. *Journal of Quality in Maintenance Engineering*, 17(2), 150-162.
- DoD USA (2013). Defence Acquisition Guidebook. USA: DoD.
- DoD USA Acquisition University (DAU) Press (2016). Defense Acquisition Acronyms and Terms. (16th ed.) Fort Belvoir, Virginia: DoD USA.
- DoD USA Federal Acquisition Regulation (FAR) 2.101 (2016). USA: DoD.
- DoD USA DODI 5000.02 (2015). Operation of the Defense Acquisition System. Washington DC USA: Government Printing Office.
- DoD USA Army Regulation 700-127 (2014). Logistics - Integrated Product Support. Washington, DC: DoD USA Headquarters Department of the Army.
- Department of Commerce USA (2012). Offsets in Defense Trade Sixteenth Study: Conducted Pursuant to Section 723 of the Defense Production Act of 1950, as Amended, Bureau of Industry and Security. USA: DoD. DoD USA Defence and Security Report Q4 (2010). Includes 5-Year Forecast to 2014. London UK: Business Monitor International Ltd, pp 8.
- Vucetic, S. (2016). Who Framed the F-35? *Government-Media Relations in Canadian Defence Procurement. International Journal*, 71(2), 231-248.
- Venelin, G., (2010). Modeling Defense Acquisition Strategy. *Consortium of Defense Academies and Security Studies Institutes Fall 2010. The Quarterly Journal*, 9(4), 53-68.
- Worger, D., Jalao, E. R., Wirthlin, J. R., Colombi, J., & Wu, T. (2014). Intervention Strategies for the Department of Defense Acquisition Process. *Journal of Defense Modeling and Simulation: Applications, Methodology, Technology*, 13(2), 139-151.
- Woodford, S., & Smith, H. (1998). The Minimization of Combat Aircraft Life Cycle Costs through Conceptual Design Optimization. 1998 World Aviation Conference September 28-30. Anaheim, CA.
- Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd ed.) London: Sage Publications.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Information Resources Co-construction and Sharing of Higher Education

Tian Juan¹

¹Changsha Aeronautical Vocational and Technical College, Changsha, Hunan, China

Correspondence: Tian Juan, Changsha Aeronautical Vocational and Technical College, No. 348, Ti Yuan Road, Yuhua District, Post Code: 410014, Changsha City, Hunan Province, China. Tel: 86-0138-7594-3352. E-mail: lovejuan13@yeah.net

Received: January 1, 2017

Accepted: January 13, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p65

URL: <https://doi.org/10.5539/ass.v13n4p65>

The research reported here is supported by the project with Hunan province education science "13th Five Year Plan" of 2016 English teaching research subject, Project name: The Construction and Application Research on college English Flipped-class deep learning field on SPOC, Project Grant No.:XJK16BYY02; phased result of research project of Changsha Aeronautical Vocational and Technical College, Project name: The construction and Application of School-based Higher Vocational English Micro-class Resources, Project Grant No.: YC1508.

Abstract

With the rapid development of information technology and education, there occurred several problems in higher education information resource construction and sharing, such as incomplete infrastructure, low overall resources level, insufficient information resources application, low teachers' information literacy and imperfect resource sharing mechanism. Under the current environment, it's necessary to establish a set of information resources co-construction and sharing education service system to balance resources sharing and improve the sharing mechanism. Also to improve colleges' management, to promote college teachers' development, to adapt to ubiquitous learning and to realize resource sharing.

Keywords: information teaching resources, co-construction and sharing, higher education

1. The Implication of Information Resources in Higher education

The information resources of higher education can be understood as the composition of the curriculum resources learning resources information tools and the service platform as the technology carrier, with the application of computer technology, communication technology and network technology. Resource construction is based on user requirements, system planning, design, development, selection, resources collection and the formation of resources system. To reflect the meaning of "common", co-construction should emphasis participating as well as construction. Co-construction aims at sharing, which is to provide resource service.

2. The Development of Higher Education Information Teaching Resources

The concept of education informatization was introduced in the 1990s, characterized by using computer assisted instruction (CAI) resources construction. At that time, resources are still the dispersion of demonstration on resources, the auxiliary properties of the traditional teaching mode of paper textbooks or simple electronic teaching materials. The concept of resource Library began to form in the late 90s, which means the structural systematic direction of resources construction. To solve technical problems of database such as heterogeneous and homogeneous interface, the corresponding standards of repository construction carried out. At present, China has made great progress in infrastructure construction of digital education and the resources development and application. With the development of big data and cloud technology, the construction of the resource is generating from unidirection to multidirectional interaction, also more attention has been given to the content resources platform and network service system construction. Higher education information resources construction is moving toward to co-construction and sharing and the direction of mutual fusion.

Chinese higher education information resource construction has been developing greatly both in the number of the repository and resources and in the way of promotion or various resources applications. Which has played an important role for the teaching reform of higher education informatization teachers' innovation in informatization

teaching and the promotion of students' autonomous learning.

3. The Existing Problem of Higher Education Information Resources Construction

Higher education informatization construction in our country has got a rapid development, but the current rapid development also brought new requirements for informational teaching innovation. On the issue of information resource construction, there exists the following deficiencies.

3.1 Inadequate Infrastructure

Now, there has been a basic coverage of the broadband and campus network in colleges and universities, and the network structure is relatively reasonable to meet the use of external information resources. But in the aspect of hardware infrastructure, many higher institutions' multimedia classroom and campus network construction do not meet the standard. More colleges and universities are lack of infrastructure software platform for system network teaching, and there are many shortcomings in terms of resources construction and sharing.

3.2 Low Resource Level

Education information resources should include core video, courseware, case studies, exercises, expanding task, such as testing and teaching tool as a system. The current resource overall level is still low, especially in the absence of a shared digital resources system of high quality. Currently teaching database is mostly the accumulation of the teaching material content, there are some problems such as low resource levels and single repetition. Part of the excellent resources scattered in the hands of individual teachers without guidance of sharing mechanism. For the Repository, the construction are mainly completed by teachers, the professional characteristics is not obvious though the discipline system is clear. Repository are mainly concentrated in the content of the teaching service but not professional education. The construction of the repository are lack of overall design and interactive feedback, which didn't pay attention to the sustainable development.

3.3 Insufficient Information Resources Application

Higher education informatization is in the groping stage of fusing teaching resources and the model of practical teaching. Many colleges are in a state of idle after the completion of the repository. The strength and depth of resources application are not sufficient. It mostly focuses on the shallow usage of multimedia courseware or supplement class teaching. There are still many difficulties in resources interactive usage utilization rate promotion and sharing.

3.4 Low Teachers' Information Literacy

College teacher's information literacy is another determinant of the resource sharing, as the main builders and users of resources co-construction and sharing, the quality of teachers' information literacy determines the quality of information resources construction the validity of the information resources practice and the informatization teaching efficiency.

3.5 Imperfect Resource Sharing Mechanism

There are many obstacles in the current implementation of resources sharing. The organization and management of the government the running mode and process of resource sharing are all lack of unified system guarantee. Different colleges and universities developed different network platform, which leads to disunity of compatible standard. It is difficult to realize resources sharing because of their different interest. It is more difficult to achieve social resources sharing for the lack of enterprise and external coordination construction mechanism. Therefore, there is urgent need from the policy level to ensure the resources construction and application of operation mechanism.

4. The Characteristics of Higher Education Information Resource Co-construction and Sharing

Resources public service platform is the important carrier of sharing education resource, construction and application. Due to the particularity of education, the process of teaching and learning interaction and network education community communication will form a large number of generative resources. For this purpose, the generation and application of these resources according to some principles will achieve maximum intensive sharing of resources and promote positive interaction between construction and use of resources, therefore form the resource service cloud model available to classroom teaching the teachers and students.

4.1 Openness

The co-construction and sharing of information resources is the openness of co-construction and sharing. It breaks down barriers between school and region. Firstly, school can construct and share resources of high quality within the school scope. Secondly, the department of education and the education technology enterprises and the

public can construct and share resources together. Thirdly, this is the co-construction and sharing of all kinds of resources for all sorts of technology platform to a greater range.

4.2 Sustainability

The co-construction and sharing of information resources is the sustainability of co-construction and sharing. Various ways should be used to improve the overall level of the informatization education resources to avoid single-minded and unipolarity. For example, to collect resources in distribution to absorb users to participate in the resources construction to generate user' evaluation and recommendation in usage.

4.3 Innovation

The co-construction and sharing of information resources is the innovation of co-construction and sharing. The innovation should be the key point to support innovative study through new learning resources. Based on the exploration, the teacher should become a common cooperation learner and thinker through resource sharing. The students should be able to understand, analyze their progress in interdisciplinary fields of study to build support for knowledge construction. Under the guidance of the principles of innovation, both teachers and students should enhance understanding and practice of the generation and application of resources to promote teacher's professional development and students' all-round development.

5. The Construction of Higher Education Information Resource Co-construction and Sharing

The overall goal of Higher education information resource construction is the construction of a integrating information education resources co-construction and sharing s service system, based on all kinds of advanced information technology under the network environment, to promote exploitation utilization of public information resources sharing to enhance the level of public service informatization and maximize meet user' demand for higher education information resources and to promote the education informatization level continuously to the modernization of education. Specific content can be reflected in the following aspects:

5.1 The Construction of the Informatization Teaching Resources

Teaching resources construction should be set out from the students' demand under the guidance of the teaching goal. The construction should contain micro class core resources, network teaching plans, teaching design, operation practice, the development of performance testing, and other supporting teaching resources. Also, it should include online community interaction regulation, questions solving, communication and development in different platforms between colleges and universities.

5.2 The Construction of Hardware Environment

Upgrade the existing communication network construction such as education network and campus network to realize the entire network coverage. Develop learning resources sharing platform from formulating information technology standards first in the application then to meet the final realization of information resources sharing between different platforms. Increase the construction of multimedia classrooms, language lab, electronic reading room, network classroom and other infrastructure construction.

5.3 The Development of Teachers' Information Literacy

Information resources are not only the ability training content of teacher's information literacy but also the support of auxiliary training. On the basis of resource sharing service platform, to build a new system of training resources, gathering resources and services, trade and communication, promoting resources processing generated resources, development of curriculum resources, in order to satisfy the demands of teachers' professional personalized learning

5.4 Balance of Resources Co-construction

Higher education information resources co-construction and sharing should concern and apply the key technology of cloud computing and big data.

Data mining and study analysis based on large data could speculate more accurate data for individualized learning. Based on cloud computing architecture, centralized management platform and resource sharing, we can really realize the connectivity of education information network and improve utilization efficiency and safety stability of resource.

5.5 Formulation of Sharing Mechanism

With the development of information technology and the education reform, as a complicated system engineering, it is necessary to form effective mechanism participating with the government, enterprises and colleges for the co-construction and sharing of education information resources. The government should attach great importance

to overall planning and provision of public services through policy guidance to promote higher vocational education and balance development of digital resource planning. At the same time, the balance of education resources could improve the level of the development of the informatization construction of hardware and software and develop education information resources construction standard. As the main body of education information resources construction, higher education should give full play to the school-based resources construction to make the resources sharing of information technology become possible between colleges, cities and even the countries

6. The Significance of Higher Education Information Resource Construction

Higher education information resources co-construction and sharing should base on the improvement of information awareness and quality of the whole people, train skilled and applied professionals and satisfy the aspirations of the value of lifelong education and lifelong learning. It benefits the college and management departments to carry out the services, to promote personalized "one-stop" services, to accelerate the construction of teaching resources and orderly implementation of communication platform. It is in favor of standardized management of data retrieval, intelligent collection and analysis, and the construction of information system as IC card system and digital library system and so on. It also helps the construction and development of teachers' team, enhance teachers' awareness of innovation and improve teachers' information literacy of teaching. By providing rich resources and standard curriculum, teacher can communicate across the country from students' demands to improve the overall teaching level and realize the informatization teaching innovation through independent course setup and data intelligent monitoring and evaluation. It makes for the adjustment of the ubiquitous learning style under the environment of informatization, hence resources construction can be based on demand to prominent feature and meet different learners' goals of self development and promote the comprehensive development of the learners. Outside agencies can realize resources sharing in whole society, and the participation of external social enterprise can make full use of shared network resources to carry out vocational training and use rich resources of autonomous learning to improve vocational skills and literacy.

References

- Chen, L. (2011). Reach on the construction of deep study of network learning resources. *E-Education Research*, 12, 69-75.
- Hu, L. L. (2012). The study on construction on strategy of Excellent Resource: Sharing Course. *Journal of Distance Education*, 6, 80-85
- Sun, Y. T., Wang, Y. T., & Ma, G. G. (2012). The co-construction and Sharing of Distance Education Resources in Higher College. *China Adult Education*, 22, 23-26

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Skills and Knowledge Competency of Technical and Vocational Education and Training Graduate

Ridzwan, C. R.¹, S. Malik², Zaliza Hanapi¹, Suriani Mohamed¹, Mohd Azlan Hussain¹ & Shafeeqa Shahrudin¹

¹ Faculty of Technical and Vocational Education, Universiti Pendidikan Sultan Idris, Malaysia

² Faculty of Science and Mathematics, Universiti Pendidikan Sultan Idris, Malaysia

Correspondence: Ridzwan, C. R, Faculty of Technical and Vocational Education, Universiti Pendidikan Sultan Idris, Malaysia. E-mail: ridzwan@fptv.upsi.edu.my

Received: January 8, 2017

Accepted: January 23, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p69

URL: <https://doi.org/10.5539/ass.v13n4p69>

Abstract

The Education Development Plan of Malaysia (Higher Education) carry the nation's aspiration to empower the technical and vocational education and training (TVET) in Malaysia. The emphasis on the development of high quality TVET graduates demands teachers and instructors of TVET who are highly knowledgeable and skilled. Thus, the emphasis on the quality of TVET teachers' education training of Faculty of Technical and Vocational Education (FTVE), Sultan Idris Education University (UPSI) has become an interesting issue that needs exploration. To evaluate the effectiveness of the education graduates, a quantitative survey research design using the Stufflebeam evaluation model was carried out. The samples were FTVE graduates that have been placed in secondary schools and vocational colleges all over Malaysia. A total of 111 respondents have answered the questionnaire. The research findings showed that the level of professional knowledge, skills and practice were high. However, parallel to the concept of continuous improvement, the elements that are at the level of moderate will be evaluated for improvement. These research findings were expected to give some information to policy maker in TVET Teachers Training Provider to increase the quality of TVET graduates in UPSI specifically and Malaysia in general in order to uphold the aspiration to become a developed nation by 2020.

Keywords: TVET; Technical and Vocational Education; TVET Teachers; UPSI

1. Introduction

Teacher education has been challenged by the need to enhance the new teachers' ability to implement new pedagogical approaches and take advantage of ICT for teaching and learning (Paivi Hakkinen et. al, 2017). The human capital development especially teachers in the field of technical and vocation education are a critical factor to generate and maintain economic growth specifically in the formation of skilled workers (Paryono, 2015). The availability of highly skilled work force is important in supporting the transformation of the entire economic sector towards activities that are intensified with knowledge, generate labour productivity and attract investments. Thus, the government of Malaysia has invested a large amount of money in the education sector. The investment in education field plays a major role in improving the social mobility and wellness of the citizens (RMK-11, 2015).

The 11th Malaysia Plan, *Rancangan Malaysia Kesebelas*, (RMKe-11), 2016-2020, will continue carrying the agenda of producing human capital that are knowledgeable, skilled and possess positive attitude to develop in the global economy. The government will focus on four fields: improving the efficiency of labor market to increase economy growth, transform TVET to fulfil the industrial needs, strengthen the life-long learning to increase knowledge and improve the quality of education system to increase the student outcome and the excellence of institutions. The economy agenda highlighted in the RMKe-11 is expected to create 1.5 million jobs by 2020 by targeting improvement in labor productivity and reducing dependency on low-skilled foreign laborers, both due to the continuous transformation of labour-oriented economy towards knowledge and innovation-oriented economy. About 60% of the expected job opportunities require skills related to TVET (Razali, 2012).

TVET is recognized as the driver of transformation in order for Malaysia to generate skilled human capital. In general, this field will create world class human capital that is needed by Malaysia in the final phase of the country becoming a developed nation (RMK-11). Although various efforts have been taken by the Ministry of

Education and related agencies to encourage and inform the public regarding the strength of existing technical and vocational education in Malaysia, most of the students and parents still choose academic stream rather than vocational stream (Abd Hair et al., 2011).

1.1 Employability of TVET Teacher Graduates in Malaysia

In Malaysia, the demand for employable higher education graduates has resulted in a national strategy that outlines desirable graduate attributes including “hard,” discipline-specific skills and “soft,” generic skills. The marketability skills and main skills, such as the popular competency skills are the impression of the concept widely known as generic skills (Bekri et al., 2011, Mohamad Sattar et al., 2012). It is also referred to as generic ability, although it is not a main skill (Berntson, Nääswall & Sverke, 2011). The purpose of this skill is to find the basis to recognize a set that is important among the skills that support achievement in task-based activities which are the central to any job (Cassidy, 2006; Guile & Young, 1998; Mohd Yusof et al., 2010).

Although generic skills have unique application for work place and job roles, it is also important to know that it is totally transferable (Kerajaan Australia, 2007; Ab Rahim & Ivan, 2007; Fitrisehara, 2008). However, there are also studies that show that there is a discrepancy between learnt skills and the needs of the job (Fuller & Unwin, 2003; Hesketh, 2000; Lave & Wenger, 1991; Lesgold et al., 1997; Gazali, 2010; Noraini & Noor, 2008; Nilsson, 2010). The learnt generic skills or the ones being used at the work place will also be used in other countries.

For example, the teamwork skill being applied in a fast-food restaurant can be transferred and applied by a waitress working in a hotel. In this globalization era, most of the employers need their employees that not only possess technical or hard skills but also generic skills or soft-skills. Employees that possess soft-skills will be able to adapt to any working situation and versatile (multi-skilled) suitable with the needs of the current job market (Overtoom 2000; Safarin & Kamarudin 2004; Ab. Rahim & Ivan, 2007). The focus on various skills of employees popularized the term employability.

Numerous terms were used to explain the meaning of employability. Most of the terms focus on the title related to the description of personality, character, behavior, communication, problem-solving, decision-making and management of organization (Yahaya Buntat, 2005; Ab Rahim & Ivan, 2007; Fitrisehara, 2009). According to Lankard (1990), the employability skill is the description of skills such as personal, interpersonal and also good attitude and behavior. The existing skills will enable the employee to adapt with the changes in working environment. However, the continuous improvement of skilled teachers must often be evaluated to ensure the high quality of TVET graduates.

According to Shulman (1987), the knowledge required for teaching is divided into three types: content knowledge (knowledge of the matter being taught), pedagogical knowledge (knowledge of teaching methods) and also the knowledge with teaching content (knowledge of teaching methods appropriate to the subject taught). Experienced instructors are clearly supposed to master all three of these aspects to help develop good and quality coach. By viewing teachers as specialists in promoting learning, it is reasonable to see them as experts such as other areas that are able to share knowledge, experience and expertise with the simple result of their experience.

1.2 Stufflebeam Evaluation Model

This model had been introduced by Stufflebeam (1966). The CIPP model was developed during the late 60s to fulfill the need for an objective evaluation. The CIPP model was used in the Austin Texas laboratory and it then was fully used in Dallas. CIPP was designed to evaluate the project funded by the Elementary and Secondary Education Act 1965 (ESEA). Billions were used to upgrade the school system and to improve the learning environment among special students. All these districts needed to be evaluated in order to fulfill the aspiration of the population but most of the teachers were unable to do so. Therefore, a resolution was achieved to train the teachers through the collaboration with the Ohio State University. This was how the CIPP Model was created.

The Stufflebeam evaluation model was designed to collect useful data to assist decision making. There were two suggested results, which were:

- i. Implementation (the result of process)
- ii. Repetition (to make decision).

The process evaluation served as the guide to implement a decision. The result of the evaluation served as the guide to decision. In the context evaluation, it acts to assist towards decision making at the level of planning and the input evaluation is more towards making restructuring decision. In order to explain the relationship between the dimensions, the following figure shows the CIPP Model by Stufflebeam (1985) that has been adapted and simplified by Razali Arof (1991). The related dimensions are context evaluation (Context), input, process and

product.

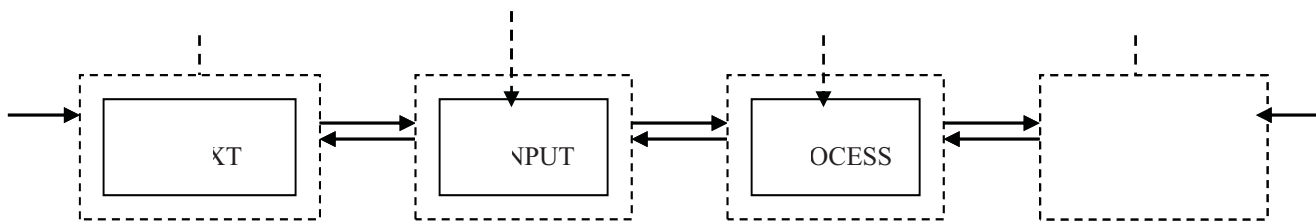


Figure 1. CIPP Education Evaluation Model (adapted and simplified).

2. Conceptual Framework of Research

The conceptual framework of this research was adapted from the CIPP Education Evaluation Model that emphasizes the relationship between four factors which are context, input, process and product. In this research, the context was observed from the aspect of education result that had been determined by the Ministry of Higher Education (MOHE), Education University of Sultan Idris (UPSI) and Faculty of Technical and Vocational Education (FTVE). The inputs were the result of the Malaysia Teacher Standards (MTS) that includes professional practice, pedagogy skills, knowledge and skills. The objectives of offered programs and the result of learning were also included.

For the conveying process, the evaluations were done based on the teaching and learning, implemented curriculum and evaluation method. The final product, which are the graduates, were observed from two main aspects which were knowledge and skills of various aspects called graduate employability Figure 2 summarizes the aspects of context, input, process and output of this research. In development of our program, we adapted Malaysian Qualification Agency standard that every program must have their own Program Education Objective (PEO), Program Learning Outcomes (PLO) and also Course Learning Outcomes (CLO). Every teaching and learning (TnL) process must complete from planning until the end of the teaching session with evaluation or assessment. Figure 2 shows our framework in this research.

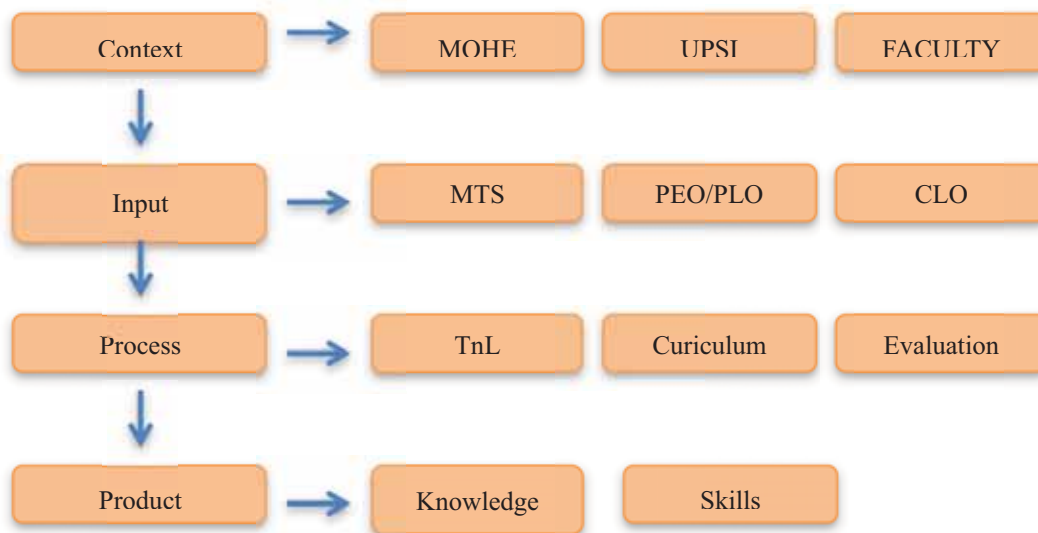


Figure 2. Conceptual Framework of Research

2.1 Research Problem

Various efforts been taken in making Malaysia a developed high-income nation by the year of 2020, such increasing the marketability of graduates (Kerajaan Malaysia, 2009). The UPSI is also putting its efforts to add value to the graduates through various programs.

However, there is no research been done to evaluate the effectiveness of FTVE graduates on the marketability and ability of graduates of Bachelor of Life Skills with Hons., Bachelor of Household Economy with Hons., and Bachelor of Agricultural Science with Hons. Thus, there is a need to study the strengths and weaknesses of implemented training programs on the readiness of the graduates to teach in schools. With this, the faculty will

be better able to restructure the programs with added value to boost the marketability of the graduates.

2.2 Research Objectives

1. Identify the implementation level of curriculum, teaching and learning and the best evaluation to produce high quality FTVE graduates.
2. Study the effectiveness level of implementation of programs offered by FTVE in order to produce innovative and competent graduates.

2.3 Research Questions

1. What is the implementation level of curriculum, teaching and learning and the best evaluation to produce high quality FTVE graduates?
2. What is the effectiveness level of implementation of programs offered by FTVE in order to produce innovative and competent graduates?

3. Research Methodology

This research is a quantitative survey research where the perceptions of the FTVE graduates were measured. This quantitative research used a questionnaire as the research instrument to evaluate the perceptions of the FTVE graduates on the effectiveness of implementation of curriculum in producing teachers who are knowledgeable and skilled. The determined variables are shown in the Figure 3.

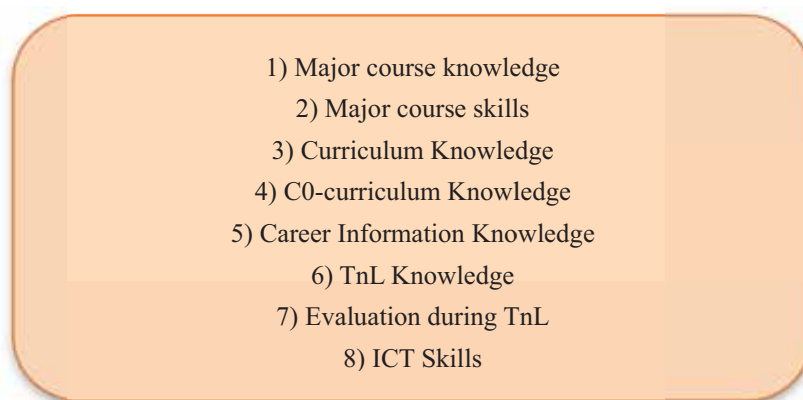


Figure 3. Main Research Constructs

The determined variables were the guides in developing the questionnaire. Chuan Yian Paw (2006) stated that a questionnaire has many functions such as recording the observation of the respondents' behavior. Mohd Majid (2005) on the other hand suggested that this method is useful in gathering information about a situation. He added that questionnaires can be used to obtain information regarding facts, beliefs, feelings, desires and etc.

3.1 Sampling

The data from the academic department of UPSI regarding the number of FTVE graduates are shown in the table 1 below. Based on Krejcie and Morgan (1970), the minimum number of samples needed was only 86 samples.

Table 1. Number of FTVE Graduates

No.	Year	Program	Total
1	2013	Life Skills	145
		Agricultural Science	114
		Household Economy	99

* Only the 2013 graduates were sampled for this research.

3.2 Instrumentation

The research was carried out using a questionnaire that consisted of 6 sections. The questionnaire was developed based on the research done by the Faculty of Social Sciences and Humanity, UPSI. However, it was modified to make it more appropriate for the graduates of FTVE. According to Chua Yian Paw (2006), a questionnaire instrument must have the following criteria:

- suitable with the readiness of the respondents
- systematic format
- clear instructions
- letters and documents enclosed with the questionnaire
- a pilot study must be done before using the instrument for real research

In this research, the researcher classified the scales specifically as shown in the Table 2. Table 2 shows that there are four scales being used to measure the perception of the graduates. The score of 1.00 to 2.33 are interpreted as low perception, the score of 2.34 to 3.66 are interpreted as moderate perception, and the score of 3.67 to 5.00 are interpreted as having high and strong perception.

Table 2. Scale to measure the level of effectiveness

Level Interpretation	Score
Low	1.00–2.33
Moderate	2.34–3.66
High	3.67–5.00

4. Research Findings

These are the findings obtained from the research carried out among the graduates of UPSI. The respondents were the graduates of Bachelor of Agricultural Science with Hons (BASH). The findings are discussed based on the research questions.

Demography of respondents

Graduates	Total
Male	40
Female	71

3.1 Research Question 1

What is the implementation level of curriculum, teaching and learning and the best evaluation to produce high quality FTVE graduates?

Table 3 shows the min score and standard deviation of BASH effectiveness of curriculum, teaching and learning and the best evaluation. The highest min was for the TnL knowledge criteria (mean=4.36, s.d=.30). The lowest score was for career knowledge criteria with a score of (mean=3.25, s.d=0.73).

Table 3. Min Score and Standard Deviation for Curriculum Implementation of Agricultural Science Graduates

Criteria	Min	Standard Deviation
Knowledge	3.764	0.647
Skills	3.430	0.515
Curriculum Knowledge	3.861	0.596
Co-curriculum Knowledge	3.785	0.684
Career Knowledge	3.250	0.730
TnL Knowledge	4.363	0.453
Evaluation Knowledge	4.193	0.466
ICT Skills	3.906	0.806
Language Skills	3.583	0.742
Generic Skills	4.000	0.744
Application of Curriculum Knowledge	3.785	1.121
Application of Co-Curriculum Knowledge	3.924	0.964
Application of ICT Knowledge	3.742	0.879
Application of Language Knowledge	3.667	0.605
Application of Generic Knowledge	4.017	0.897
Application of Moral Values Knowledge	4.353	0.513

Note: N=111; Overall mean=3.852; s.d=0.591

3.2 Research Question 2

What is the effectiveness level of implementation of programs offered by FTVE in order to produce innovative and competent graduates?

Table 4 shows the min score and standard deviation of BASH implementation of programs. The highest min was for item 'helps me in increasing interpersonal communication skill' (mean=4.16, s.d=.95). The lowest score was for item 'helps me in increasing analytical skill' (mean=3.97, s.d=0.46).

Table 4. Mean Score and Standard Deviation for Effectiveness of Agricultural Science Program Implementation

Criteria	Min	Standard Deviation
Interpersonal communication	4.156	0.954
Helps me in increasing the skill of critic and critical thinking	3.969	0.861
Helps me in increasing problem-solving skill	3.938	0.948
Helps me in increasing analytical skill	3.875	0.907
Helps me in working as a team	4.000	0.984
Helps me in applying positive values and Experiences	4.063	0.914
Helps me in increasing exploration of general knowledge and current issues	4.125	0.942
Help me in increasing High Order Thinking Skill (HOTS)	4.063	0.948
Helps me in increasing skills in the field of entrepreneurship	3.969	0.990

Note: N=111; Overall Mean=4.017; s.d=0.897

5. Discussion

The research findings showed that the effectiveness level of the program and curriculum implementation in FTVE, UPSI is high. This is corresponding with globalization era and the developing world. In this globalization era, most of the employers need their employees that not only possess technical or hard skills but also generic skills or soft-skills. Employees that possess soft-skills will be able to adapt to any working situation and versatile (multi-skilled) suitable with the needs of the current job market (Overtoom, 2000; Safarin & Kamarudin, 2004; Ab. Rahim & Ivan, 2007).

Knowledgeable and skilled graduates will develop the human capital in order to assist Malaysia in the succession of the 11th Malaysia Plan, *Rancangan Malaysia Kesebelas*, (RMKe-11). This statement supported by findings in this research shows that our level of knowledge amongst out graduate very high. Thus, the government will focus on four fields which are improving the efficiency of labor market to increase economy growth, transform TVET to fulfil the industrial needs, strengthen the life-long learning to increase knowledge and improve the quality of education system to increase the student outcome and the excellence of institutions.

This research used the CIPP Education Evaluation Model and emphasized the relationship between four main factors which are contexts, input, process and input from the perspective of learning output as determined by the MOHE, UPSI and FTVE. All the inputs were from the Malaysian Teacher Standards (MTS) that includes professional practice, pedagogy skills, knowledge and skills. The objectives of offered programs and the result of learning were also included. Therefore, FTVE, UPSI is on the right track of developing graduates who are knowledgeable and skilled.

6. Conclusion

This research is expected to provide an understanding regarding the implementation of curriculum and can be used to develop and action plan that assists in increasing the effectiveness of technical and vocational training implementation. This will also assist towards achieving the nation's aspiration of becoming a high-income nation by 2020. Comprehension of the processes that exist within the system of developing skilled workers will enable the nation in planning the human capital to lead the economy parallel with the Economy Transformation Plan (ETP) that will be implemented by the government in order to achieve the vision 2020.

Acknowledgements

This research funded by Research Management and Innovation Centre, Sultan Idris Education University under University Research Grant (GPU) Top Down for Faculty of Technical and Vocational Education.

References

Abd Hair Awang, Rahim Md. Sail, Khadijah Alavi & Ismi Arif Ismail. (2011). Image and Students' Loyalty

- Towards Technical And Vocational Education And Training. *Journal of Technical Education and Training*, 3(1), 13–28.
- Abu Bakar Nordin. (1991). *Kurikulum Perspektif Dan Pelaksanaan*. Kuala Lumpur: Pustaka Antara.
- Azizi Yahya (1992). *Aspirasi Pekerjaan Dan Masalah Akademik Di Kalangan Pelajar Sekolah Menengah Vokasional Pertanian Rembau, Negeri Sembilan*. Tesis Sarjana yang tidak diterbitkan. UKM.
- Bekri R. et al. (2011). Penguasaan *Core Abilities* Pekerjaan Dalam Kalangan Graduan Diploma Kemahiran Malaysia Penyejukan Dan Penyaman Udara: Satu Kajian Kes. Prosiding Seminar Serantau Kelima Tahun 2011 Universitas Riau, Pekan baru dan Universiti Kebangsaan Malaysia pada 12 – 14 Mei 2011, Pekan Bau Riau, Indonesia.
- Benson, J., & Micheal, W. B. (1990). *A Twenty-Year Perspective On Evaluation Study Design*. In H. J. Walberg & G. D. Haertel (Eds.), *The International Encyclopedia of Educational Evaluation* (pp. 545-553). Oxford, England: Pergamon.
- Berntson, E., Nääswall, K., & Sverke, M. (2011). Investigating the relationship between employability and self-efficacy: A cross-lagged analysis. *European Journal of Work and Organizational Psychology*, 17(4), 413-425. <https://doi.org/10.1080/13594320801969699>
- Cassidy, S. (2006). Developing employability skills: peer assessment in higher education. *Education + Training*, 48(7), 508-517. <https://doi.org/10.1108/00400910610705890>
- Cronbach, L. J. (1963). *Designing Evaluation of Educational of Social Programs*. San Francisco: Jossey-Bass.
- Finch, C. G. (1984). *Strategic Planning In Education: A Guide For Policy Makers*. Alexandria, Va: National School Boards Association.
- Fitrisshara, K., Hamzah, R., & Bakar, A. R. (2009). Employability Skills among the Students of Technical and Vocational Training Centers in Malaysia. *European Journal of Social Sciences*, 9(1), 147-160.
- Fitz-Gibbon, C. T., & Morris, L. L. (1978a). *Evaluator's Handbook*. Beverly Hills: Sage.
- Fitz-Gibbon, C. T., & Morris, L. L. (1978b). *How To Design A Program Evaluation*. Beverly Hills: Sage.
- Fuller, A., & Unwin, L. (2003). Learning as Apprentices in the Contemporary UK Work-place: creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16(4), 407-426. [doi:10.1080/1363908032000093012](https://doi.org/10.1080/1363908032000093012).
- Gainer (1988). *ASTD Update: Basic Skills*.
- Ghaziah Ghazali & Dawn Bennet (2017). Employability for music graduates: Malaysian educational reform and the focus on generic skills. *International Journal of Music Education*. <https://doi.org/10.1177/0255761416689844>
- Guile, D., & Young, M. (1998). Apprenticeship as a conceptual basis for a social theory of learning. *Journal of Vocational Education & Training*, 50(2), 37–41. <https://doi.org/10.1080/13636829800200044>
- Gurvinder Kaur Gurcharan Singh & Sharan Kaur Garib Singh. (2008). Malaysian Graduates' Employability Skills. *UNITAR E-JOURNAL*, 4(1), January 2008.
- Harris, B. W. (1980). *Improving Staff Performance Through In Service Education*. Boston. Allyn and Bacon.
- Harvey, L. (2001). Defining and Measuring Employability. *Quality in Higher Education*, 7(2), 97-109. <https://doi.org/10.1080/13538320120059990>
- Hassan, R., Razzaly, W., & Alias, M. (2012). Technical and Vocational Education Teachers in Malaysia. A country paper presented during the Experts Meeting organised by SEAMEO VOTTECH and UNESCO-UNEVOC in Conjunction with International Conference on The Excellence in Teacher Education and Research Innovation by Rajabhat Universities Network, Bangkok, Thailand, 25-28 December 2012.
- Hesketh, A. (2000). Recruiting an elite? Employers' perceptions of graduate employment and training. *Journal of Education and Work*, 13(3), 245-71. <https://doi.org/10.1080/713676992>
- Kay, C., Fonda, N., & Hayes, C. (1998). Growing an innovative workforce: a new approach to education and training. *Education + Training*, 34(3), 267-275. <https://doi.org/10.1108/00400919810234054>
- Kementerian Pendidikan Malaysia. (1987). *Cadangan Strategi Pendedahan Dan Latihan Untuk Pelaksanaan Kurikulum Bersepadu Sekolah Menengah*. Kuala Lumpur: Pusat Perkembangan Kurikulum.
- KilPatrick, S., & Allen, K. (2001). *Review of research: factors influencing demand for vocational education*

- and training courses*. Kensington: National center vocational education research.
- Lave, J., & Wenger, E. (1991). *Situated Learning – Legitimate Peripheral Participation*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511815355>
- Lesgold, A., Feuer, M. J., & Black, A. M. (1997). *Transitions in Work and Learning: Implications for Assessment*. Washington: National Academy Press.
- Loh Poh Seng (1996). *Kesesuaian Kurikulum Program Bacelor Pendidikan (Sains Pertanian)*, Universiti Pertanian Malaysia. Latihan Ilmiah tidak diterbitkan.
- Mardevan a/l Marimuthu (1991). *Kajian Keberkesanan Kursus Dalam Perkhidmatan Untuk Guru-Guru Mata Pelajaran Kemahiran Hidup*. Tesis sarjana, Universiti Kebangsaan Malaysia, Bangi.
- Ministry of Human Resources. (2011). *Kajian Tahap keboleherjaan graduan persijilan kemahiran Malaysia di Institut Latihan Kemahiran Awam*.
- Mohd Nasir Ali (1994). *Pengaliran Pelajar Di Sekolah Menengah Rendah Dan Kesannya Terhadap Status Mata Pelajaran Elektif*. Jurnal Pendidikan.
- Mohd Yusof Husain, Seri Bunian Mokhtar, Abdul Aziz Ahmad, & Ramlee Mustapha (2010). Importance of Employability Skills from Employers' Perspective. *Procedia - Social and Behavioral Sciences*, 7(C), 430-438. <https://doi.org/10.1016/j.sbspro.2010.10.059>
- Mohd. Gazali Abas. (2011). *Isu-isu semasa Dalam Pendidikan Latihan Teknikal dan Vokasional di Malaysia*. JPM. Unit Perancang Ekonomi. Kuala Lumpur.
- Nilsson, S. (2010). Enhancing individual employability: the perspective of engineering graduates. *Education + Training*, 52(6/7), 540–551. <https://doi.org/10.1108/00400911011068487>
- Noraini Mohd Noor & Noor Murni Abd Sukor (2008). *Penerapan Kemahiran Employability di Institut Latihan Perindustrian Pasir Gudang Johor*.
- Nurita, Shaharudin, & Ainon. (2004). *A survey of students' employability skills: A case of Unitar*.
- Omar, M. K., Bakar, A. R., & Rashid, A. M. (2012). Employability skill acquisition among Malaysian community college students. *J. Soc. Sci.*, 8, 472-478. <https://doi.org/10.3844/jssp.2012.472.478>
- Overtom, C. (2000). Employability skills: An update. *ERIC Digest No. 220*.
- Päivi Häkkinen, Sanna Järvelä, Kati Mäkitalo-Siegl, Arto Ahonen, Piia Näykki & Teemu Valtonen. (2017). Preparing teacher-students for twenty-first-century learning practices (PREP 21): a framework for enhancing collaborative problem-solving and strategic learning skills. *Teachers and Teaching*, 23(1), 25-41, <https://doi.org/10.1080/13540602.2016.1203772>
- Paryono, P. (2015). Approaches to preparing TVET teachers and instructors in ASEAN member countries. *TVET@Asia*, 5, 1-27.
- Quek Ai-Hwa (2005). Learning for the workplace: a case study in graduate employees' generic competencies. *Journal of Workplace Learning*, 17(4), 231-242. <https://doi.org/10.1108/13665620510597185>
- Rahim, M. B., Hashim, M. N., & Baser, J. A. (2011). *Tinjauan ke atas keterampilan*.
- Rajiv Rasikchandra Malkan. (2009). *Post-Secondary Technical Vocational Education Training: A Qualitative Case Study of Industrial Training Institute (ITI) In Maharashtra State, India*. PhD Dissertation of the Graduate College at the University of Nebraska.
- Ramlah Hamzah (1992). *Persepsi Dan Masalah Guru Terhadap Mata Pelajaran Kemahiran Hidup*. Jurnal Pendidikan Guru. Bil. 9 – 1993 (ISSN: 01277316): 50 -71.
- Rancangan Malaysia ke-11 (RMK-11). (2015). Kerajaan Malaysia. Report.
- Rasul, M. S. et al. (2009). Aspek Kemahiran “Employability” yang Dikehendaki Majikan Industri Pembuatan Masa Kini (Aspects of Employability Skills Needed by the Manufacturing Industries Employers). *Jurnal Pendidikan Malaysia*, 34(2), 67–79.
- Razali Arof (1991). *Pengantar Kurikulum*. Kuala Lumpur: Dewan Bahasa Dan Pustaka.
- Shakir, R. (2009). Soft skills at the Malaysian institutes of higher learning. *Asia Pacific Educ. Rev*, 10, 309-315. <https://doi.org/10.1007/s12564-009-9038-8>
- Sharifah Mohd Nor. (1989). *Perlaksanaan Masa Lanjutan (Kemahiran Hidup) Di Sekolah Menengah: Satu*

kajian Perintis.

Shulman, L. (1987). Knowledge and teaching: foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22. <https://doi.org/10.17763/haer.57.1.j463w79r56455411>

Stufflebeam, D. L., Folely, W. J., Gephart, W. J., Guba, E. G., Hammond R. L., Merrimman, H. O., & Provus, M. M. (1971). *Educational Evaluation And Decision-Making*. Itasca, IL: F.E. Peacock.

The Conference Board of Canada. (1996). *Employability Skills*. Ottawa Ontario.

Universiti Putra Malaysia (UPM). (2012). *Kajian Tahap Penerimaan Masyarakat Terhadap Latihan Kemahiran Report*.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

The Importance of Multicultural Education in Schools in the Era of ASEAN Economic Community

Imron Arifin¹ & Agustinus Hermino²

¹ State University of Malang, Indonesia

² Kanjuruhan University, Malang, Indonesia

Correspondence: Agustinus Hermino, Kanjuruhan University, Malang Indonesia. E-mail: agustinus_hermino@yahoo.com

Received: January 22, 2017

Accepted: February 13, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p78

URL: <https://doi.org/10.5539/ass.v13n4p78>

Abstract

The purpose of this paper is to provide an understanding importance of multicultural education for students in the schools relate with diversity in the era of Asean Economic Community. The ASEAN, which groups eleven countries, is a very diverse region, with different dynamics that are owned by their respective countries, particularly when associated with education. Diversities can be seen from the many islands, ethnicity, culture, language and religion. Regardless all those differences, these eleven countries share a similar emphasis on human resource development as a key in developing the whole nation to enter the knowledge-based economy and global environment. Pluralism that is the one of the power and uniqueness in the ASEAN Economic Community that can be interpreted as diversity in unity. Diversity, on the one hand is a blessing, because it actually reflects the diversity of the wealth of cultural treasures. But on the other hand, diversity is also great potential for growing proliferation of conflicts, particularly if such diversity is not able to run well. To build the ASEAN community who recognize and appreciate the differences required processes and better understanding through relevant education. Education, as a fundamental human right, is considered very important and strategic for developing their human resources. The right to education imposes an obligation upon countries to ensure that all children and citizens have opportunities to meet their basic learning needs. Promoting quality and equity education is a common policy for countries regardless their different levels of development. Herein lies the importance of multicultural education. Multicultural education becomes strategic for ASEAN nations to be able to manage the plurality creatively, and can be interpreted as an internalization process of values in educational institutions.

Keywords: cultural diversity, multicultural education, ASEAN Economic Community, character education

1. Introduction

Globalization will affect the nation and the state, society and even individuals in society. The effect of globalization on a nation occurred in various fields, including in the field of education. In education, globalization has a major influence on educational change, both system and curriculum applied.

In addition to the impact of globalization which must be dealt with, the world of education have a new challenge to be faced is competing in the ASEAN Economic Community (AEC). Education condition in some countries of ASEAN ready or not ready adamant to take part in the current global capitalization in the domain of applicability MEA. In application of few of the policy is taken more or less related to education, because it is assumed through education labor-power printed with the competencies that are expected to compete globally.

Southeast Asia is a region covering 4.889.942 sq km which consist of 3,219.506 sq km land and the rest, 1,670,436 sq km is water. It has eleven member countries (Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam and Timor Leste), with a combined total population of around 556 million. The number of population varies from the fourth world populous country like Indonesia with 241 million people to the least populace country like Brunei Darussalam (372,361, July 2015 est.). They are different not only in terms of number of population but also in terms of geography, culture, and level of socio-economic development.

Regardless all those differences, these eleven countries share a similar emphasis on human resource development as a key in developing the whole nation to enter the knowledge-based economy and global environment. It is

realized that we are moving fast forward the situation in which all nations operate in a global market environment. No country can grow in isolation. ASEAN countries are facing unprecedented challenges, brought by the convergent impacts of globalization, the increasing importance of knowledge as a principal driver of growth and the ICT revolution. Education, as a fundamental human right, is considered very important and strategic for developing their human resources. The right to education imposes an obligation upon countries to ensure that all children and citizens have opportunities to meet their basic learning needs. Promoting Multicultural Education, Quality and Equity Education is a common policy for countries in Southeast Asia region regardless their different levels of development.

2. Method

This paper is aimed to get an understanding importance of multicultural education for students in the schools relate with diversity in the era of Asean Economic Community within the school level to produce a quality education entered the era of the ASEAN Economic Community (AEC). Meanings of the data was based on the depth of the facts obtained in the study by researchers before, which then meant to get the meaning of a suitable and relevant to the situation in Indonesia.

In-depth discussion is supported by the results of research or opinions by previous researchers were consistent with that proposed by Creswell (2009: 25), that: "The literature review accomplishes several purposes. It shares with the reader the result of other studies that are closely related to the on being undertaken", which the statement can be interpreted that the amount of resources will be able to read the relevant support of the meaningfulness of a study that will produce in-depth analysis.

As well as McAlpine & Amundsen (2011: 211), that: "We must recognize that we benefit as well and will be able to apply our learning to various academic roles (researchers, supervisors, teachers, program directors). This approach to knowledge and identity development has the potential to bring about individual change in ways of thinking and acting, even if institutional change is not yet an outcome". As for the statement can be interpreted that the amount of learning and information from various scholars will enrich our study to analyze a study which will certainly contribute to new discoveries that have not been there before or reinforce previous findings.

Furthermore, Mertens (2010: 225) also affirmed regarding qualitative research, that: "There are key words associated with qualitative methods include complexity, contextual, exploration, discovery, and inductive logic", which the statement can be interpreted that the complexity in qualitative research and in-depth analysis of discernment, will be able to produce an in-depth research discoveries meaning anyway.

Based on various scientific opinion on the above, the results of the discussion in this study is expected to find meaning and contribute to the relevant findings.

3. The Problem of Quality Education relate with Multicultural Education

To understand the issue of quality in education relate with multicultural education, it can be seen that education as a system with all its interdependent components: inputs, process, outputs and feedback. Under the inputs, students as raw inputs and curriculum, learning materials, teachers, principals and other educational resource persons, learning facilities and environment as instrumental inputs. The second component, process, is where all inputs interact in the process of teaching-learning to reach educational goals and objectives. The third component, output, is the product of the interaction among the inputs, which can be seen from the student's improved performances in terms of cognitive, affective, psychomotor domain. Feedback mechanism is another important component of the education system that will give us information on how the system succeeds or fails in achieving goals and objectives.

Teachers are essential players in promoting quality education. Well trained, highly motivated, dedicated and professionally competent teachers are very important. This is strongly related to the financial and habit reward they get from their profession as teachers. What is important in improving the quality of education is not only having enough number of teachers in school and class, but enough number of good quality teachers which are highly motivated and dedicated to their jobs. This region has a shortage of teachers both in number and quality.

Multicultural education refers to the learning of appropriate knowledge, attitudes and skills related to the respect and appreciation of different cultures and other differences which include race, ethnicity, religion etc. Gollnick and Chinn (1990) recommend five goals for multicultural education. These goals also emphasize issues beyond the boundaries of ethnic or racial issues. They include: i) the promotion of strength and value of cultural diversity, ii) an emphasis on human rights and respect for those who are different from oneself, iii) the acceptance of alternative life choices for people, iv) the promotion of social justice and equality for all people, and v) an emphasis on equal distribution of power and income among groups. For most intents and purposes the focus of

this article is on the first two. Most large societies often have subcultures or groups of people with distinct sets of behavior and beliefs that differentiate them from a larger culture of which they are a part. The subculture may be different because of the age of its members, their race, ethnicity, or class. The qualities that determine a subculture as distinct may be aesthetic, religious, occupational, political, sexual or a combination of these factors. At first glance, it may seem that only in countries whose population is made up many different cultural communities that the issue of multicultural education seems pertinent. Hence in predominantly mono-cultural or bicultural societies, there is no need to study other cultures. This myth is pervasive in such societies. However with the phenomenon of transmigration, the world becoming a borderless village, increasing interdependence among countries, and the ominous threat of a “clash of civilizations” the issue of multiculturalism and its place in education is becoming more important. A deliberate and conscious effort has to be undertaken to promote respect and not just mere tolerance for differences, including cultural ones which make up the most contentious of differences amongst mankind. This imperative was officially declared even as early as the Swann Report (DES, 1985) which emphasized the need to teach all young people how to respect ethnic and cultural differences and to accept them as part of the cultural richness of life in our modern world, and not as a threat.

4. Cultural Diversity and Multiculturalism

To build character we can strengthen community identity and resilience of ASEAN are multi-cultural, which has a wide variety of cultures. Cultural diversity is one of the nation's wealth in ASEAN, which became one of the foundation in and the nation in the ASEAN region, including in the development of educational programs.

Recognition of cultural diversity was almost as congruent with the principles of multiculturalism, which is based on the 'politics of recognition', recognizes every citizen has equal footing with each other. No less important, the recognition of diversity is based on the principle of mutual respect and respect in the midst of differences (Mitaray, 2000; Banks, 2004, Bokhorst-Heng, 2007).

Cultural diversity and multi-culturalism in ASEAN can give color to each of the entities and cultural groups that exist in each ASEAN member country, and at the same time will encourage the asean economic community to promote education in the principles of understanding in diversity. Therefore, awards cultural diversity should not be considered complete or allowed to develop by itself; instead they should be reinforced constantly through various channels of social interaction and education at various levels.

In the context of cultural diversity and the multicultural nations in the ASEAN needs to reinforce and internalize the values, such as: identity and resilience; personality and strong character; cling to democratic values and civility; high appreciation of the law and order; social justice, politics, and economics; have a formal individual piety and piety communal-social as well; civilized (civility) in the sphere of civil society; appreciate diversity and multicultural life; and have a perspective of local, national and global at the same time.

Furthermore, it can be interpreted that the ASEAN community that has cultural diversity and multicultural is a plural society have fundamental characteristics such as: (1) promoting mutual respect; (2) understanding life together lasting territories; and (3) to support each other's progress and strength of the economy and education.

5. Multicultural Education

The roots of multicultural education, coming from the attention of a US education experts, Prudence Crandall (1803-1890) are intensively propagate views on the significance of the background of learners, both in terms of aspects of culture, ethnicity, and religion. Educational attention in earnest background of learners is the forerunner for the emergence of multicultural education (Banks, 2008).

Thus, in general, is the concept of multicultural education and practical education that attempts to provide an understanding of the diversity of race, ethnicity, and culture in a society. The goal is for people to live in peace among communities of different racial, ethnic, cultural, and religious differences (Charlesworth, 2008).

Multicultural comes from the word that means lots and multi-cultural/ culture that means the culture or customs. Gorski (2005) defines multiculturalism comes from the root word multi (many), culture (cultural, and culturalism). Essentially, the multiculturalism entails recognition of the dignity of human beings who live in the community with the culture of each unique. This means that the concept of multiculturalism implies that every human being with various tribes, religions, races, customs and traditions are valued and respected presence in the life of a nation and the state. this means there is no view that the same care should be contested, but should seen as a diversity that must be knitted as well in order to give a sense of beauty, comfort, peace, harmony, and a sense of security. According Mason (2013) mentioned that multiculturalism is an honest effort to organize pluralistic society into a multicultural society that is harmonious at once dynamic because their respect for freedom and human equality. In this case multiculturalism emerged as an attempt to build a harmonious society

(secure, peaceful, tolerant) which has a multi-cultural (traditional, religion, race, ethnicity) in order to live together in peace and harmony. Thus we need an honest effort of the organizers of the country (the legislative, executive and judicial) to manage the community of nations in order to manifest the life of a harmonious society (tolerant, harmonious, peaceful) in the diverse cultures, religions, races, customs, and arts and culture).

Andersen and Cushner (1994) in Tilaar (2004) states that multicultural education can be defined as education about cultural diversity. Then, Hermino (2014) defines multicultural education as education that want to explore the differences as a gift from God, and we are able to address these differences with a full-tolerant. Similarly, Gorski & Pothini (2014) argues that simply multicultural education is education about the diversity of cultures in response to demographic and cultural changes in a specific community or even the world globally.

Multicultural education is a synthesis of anti-racist education approach and multi-cultures used internationally in the 60s to 90s (Hoffman, 1996). In ASEAN since its inception has had a lot of diversity of culture, ethnicity, language and religion. It is this diversity that is often termed multicultural or intercultural. Both terms describe a situation where there are a lot of culture in a country (Tilaar, 2004).

Furthermore, Gorski & Pothini (2014) stated that the underlying goal of multikultural education is to effect social change. The pathway toward this goal incorporates the strands of transforation: (1) the transformation of self; (2) the transformation of schools and schooling; and (3) the transformation of society.

Based on the understanding of the above it can be interpreted that the purpose of multicultural education is to be able to respect cultural diversity and encourage them significantly to be able to recognize and eliminate prejudice and discrimination that already exists. In essence, multicultural education has five focal issues, such as: (1) the process of education that respects, recognizes and celebrates the differences in all areas of human life. Multicultural education stimulate students to the fact that developed in the community, which is a way of life, customs, culture, all of which have enriched human life; and (2) the process of applying equation balance education and human rights, discrimination against injustice and voicing values that build balance; (3) Multicultural education is based on the pedagogic teachers, pedagogic based on human equality (equity pedagogy); (4) multicultural education aimed at the realization of human intelligent in ASEAN community especially for students during learning process in the school; and (5) the principle of globalization.

6. The Role of Family

Hermino (2016) mentioned "If there is righteousness in the heart, there will be beauty in the character; if there is beauty in the character, there will be harmony in the home; if there is harmony in the home, there will be order in the nation; if there is order in the nation, there will be peace in the world".

Considering various dynamics of globalization in the field of education today which affect the lives of children in particular, the character education is a very important and strategic step in rebuilding the identity of Asean Economic Community and mobilize society formation Asean stronger. But it is important to stress that character education should involve all stakeholders, such as households and families; school; and the wider school environment (society). Therefore, the first step to do is reconnect relations and educational networks barely connected between the three environmental education. Formation of character and character education is not going to work for between three educational environment there is no continuity and harmonization.

Schools, in essence not just a "transfer of knowledge" itself. As stated by Erik, et al (2014), that the school is not solely a place where teachers impart knowledge through a variety of subjects. Schools also are institutions that seek business and process oriented learning on the value (value-oriented enterprise). Furthermore, Rama (2015) also stated that the organization of a school system in itself was an effort of moral (moral enterprise), because it is a deliberate effort to control the pattern of human society development.

Formation of character and character education through schools, thus, can not be done solely through the learning of knowledge, but it is through planting or values education. In general, studies on the value usually includes two key areas, aesthetics, and ethics. Aesthetics refers to matters of and justification for what he viewed humans as "beautiful", what they enjoy. While ethics refers to things on and justification of appropriate behavior according to the standards prevailing in society, whether they are from the religion, customs, conventions, and so on. And those standards are moral values or morals about which actions are good and which are bad.

ASEAN comprehensive community clearly has a major influence on the success of planting aesthetic values and ethics for the formation of character, especially to students in school. From the perspective of educational management, Gardner, et al (2008) argues that the social situation with the value system espoused, influence the attitudes and perspectives of society as a whole. If the system of values and their view is limited to the "here and now", the efforts and ambitions are limited to the here and now as well.

In that context, the meaning of values in character education emphasizing togetherness member concerning the same historical experience, common objectives, the same steps, the same solidarity. Here, the importance of education in the family to bring a shared responsibility in upholding the values of good and prevent bad values that starts within the family to children, which will be useful for the development of life in the future.

Core value of multicultural education is reminiscent of the importance of multicultural education that includes four dimensions; dimensional man with God, man and man, man and the universe, and man with himself.

7. Educational Value

The formation of character is part of the educational value through school is a noble effort is urgently required. In fact, if we talk about the future, the school is responsible not only in print learners who excel in science and technology, but also the identity, character and personality. And it is relevant and contextual not only in countries that are experiencing a crisis of character, but also for developed countries even (McGill, 2013; Yuan, 2011; Jayne, et al, 2015).

Enterprises character formation through the school, in addition to character education simultaneously can also be done through education of values with the following steps: *first*, apply a "modeling" or "exemplary", Ie, socialize and familiarize school environment to revive and uphold moral values and moral right through the model or example. Each of teachers and other educational staff on school premises let to become role models of life (living exemplary) for each learner. They must also be open and ready to discuss with the students about the values of the good.

Second, explain or clarify to the students constantly about the value of the good and the bad. This effort could be accompanied by the measures; reward and cherishing good values and otherwise denounce and prevent the enactment of bad values; affirm the values of good and bad in an open and continuous; provide opportunities for learners to choose different alternatives based on the attitudes and actions; perform free choice after a deep weigh the consequences of every choice and action; familiarize behave and act on good intentions and prejudices and objectives of the ideal; familiarize behave and act with good patterns are repeated continuously and consistently.

Third, apply a character-based education. This can be done by applying a character-based approach into each subject existing value in addition to specialized subjects for character education, such as religious studies, civics, history, art and culture. Looking at the criticism of these subjects, it is necessary to reorient both in terms of content and approach, so that they not only be verbal and mere rote, but actually managed to help reestablish the character and identity of the nation.

Immediately obvious, character education related to other fields, especially in culture, education, and religion. All of the three areas of past life is closely linked with the values were very important for people in various aspects of life. Culture or culture generally include the noble values that have traditionally been the role model for the community. Education-in addition to covering the transfer and transmission of knowledge-is also a very strategic process in instilling values in order civilizing human child. Meanwhile, the teaching of religion also contains a variety of noble values for humans to achieve human dignity and culture.

Observing the foregoing, it is clear that the meaning of values in character education related to other fields, especially in culture, education, and religion. All of the three areas of past life is closely linked with the values were very important for people in various aspects of life. Culture or culture generally include the noble values that have traditionally been the role model for the community (Jayne et al., 2015; Camicia, 2009; Slavin, 2006). Education-in addition to covering the transfer and transmission of knowledge-is also a very strategic process in instilling values in order civilizing human child. Meanwhile, the teaching of religion also contains a variety of noble values for humans to achieve human dignity and culture (Duke, 2000; Epstein et al., 2002; Fullan, 2007).

8. Transformational Education Leadership in the Globalization Era of ASEAN Economic Community

The word globalization is derived from the word global, which literally means global or universal, comprehensive, universal. The word then became a term which refers to a keadaan where a country with other countries have been fused. Territorial boundaries, cultural, and so is already not an obstacle anymore to perform the unification. Thus literally, globalization means the merging of the various countries that exist on this globe into a single entity. Globalization is a process of making something (an object or behavior) as a characteristic of every individual in this world without being restricted by region (Schein, 1985; Reeves, 2006; Stromquist, 2002; Mason, 2013)

With regard to transformational leadership, then according to Robbins (2005), transformational leadership is leadership where the leader is able to inspire the staff her to be able to prioritize the progress of the organization

of the personal interest, and able to provide good care to its staff and is able to change the consciousness of the the staff to be able to cooperate to the fullest and see the organization as a whole unity of view to achieve the goal.

Bass & Riggio (2006) defines transformational leadership is a form of leadership in which the leader is able to expand and improve working interest of its members, or the system of leadership where leaders are capable of triggering sensitivity and acceptance of vision, mission and goals of the organization, and where the leader has control over its members to be able explore their potential for the progress of each organization.

Based on the thought above, then in the face of education in the era of globalization are increasingly complex and with high competitiveness, it is necessary educational leaders who can transform charisma, inspiration, intellectual stimulant, and individual consideration to the interests of the staff as a whole and the development of educational institutions led in accordance with the vision, mission and educational goals to be achieved (Soutworth, 2002; Hallinger, 2003; Moolenaar et al., 2010; Balyer, 2012; Rodriguez, 2014).

Referring to the above understanding, the transformational leadership in the field of education, especially in Indonesia in addressing the globalization era in the arena of the ASEAN Economic Community (AEC) is a leadership that can combine three behaviors, the charisma, individualized consideration and intellectual stimulation.

Furthermore, that when education is involved welcoming the ASEAN single market in 2015, the leadership role of transformational education is to prepare skilled human resources, sensitive and critical. Skilled work, sensitive and critical issues in the role. The third skill is absolutely present in Asean single market. Single market in the era of globalization can not be understood from the economic aspect, but also from non-economic aspects, one of which is in the field of education (Torres, 2002; Soutworth, 2002; Tatto, 2006; Loomis, et al, 2008; Moolenaar, et al, 2010). That understanding also needs to be built and internalized so that Indonesia became an independent country and dignified. Independent means free from the intervention of other nations in determining the direction of its policies, including policies to educate and welfare of its people through education and dignified means working together with other nations without losing their identity, and this can be optimized through character education in schools.

Competition quality of education in Indonesia also needs to be examined is wise in accordance with the purpose of education in Indonesia. However, the competitive dynamics of global education in ASEAN in the era of the ASEAN Economic Community (AEC) can not be circumvented by the education system in Indonesia, and tumpuhan implementation towards global competition in education is certainly relies on educational leadership who have extensive knowledge, and the concept of leadership can combine logic thinking, analytical thinking, and creative thinking in leading educational institutions which it is responsible. The ability of the educational leaders in the era of globalization, which also requires the freedom to innovate in charge, who mandated him to develop their ideas in a way of leading educational institutions to the maximum (Burbules, 2000; Northouse, 2001).

9. Acculturation Character Education in the Learning Systems

One of the key in the dynamics of the globalization of the times in the field of education, is with regard to character education. Character education is very important given to children in schools, it is that the children understand the importance of moral values of humanity and respect for the situation and environmental conditions in the dynamics of the growing progress of education in ASEAN. Character education is very helpful in preparing students into life in the era of globalization. The conditions in line as proposed by Carol Copple, Richard de Lisi, and Irving Sigel as written in Spodek (1982: 3): "... *The development of the child is viewed as simple one type of behavioral change. For the leaning theorist, intellectual development consists of an accumulation of gradual learnings, of changes in specific behaviors*". The statement can be interpreted that the development of a child's behavior is influenced by the surrounding environment, and it will also affect the outlook and the concept of thinking of children against himself and the surrounding environment.

With regard to the values contained in the learning curriculum, the research conducted by previous researchers (Misco, 2007; Peng et al, 2013; Agrawal, 2013; Mason, 2013) stated that the curriculum used at school- school is the curriculum should be relevant to the needs of the school, both academic interest, as well as with regard to the moral development of the children in the school were still in the rules of the values that characterize education in schools that exist in the face of education in the era of globalization.

Against these values, it is also in line as proposed by Allport, as quoted by Kadarusmadi (1996: 55) states that the value is: "*a belief upon which a man acts by preference. It is this a cognitive, a motor, and above all, a deeply*

propriate disposition.” Understanding the meaning that it is the belief that human preferences used in action. Humans select or choose activities based on the value of his own beliefs. Similarly Ndraha (1997: 27-28) states that the value is abstract, because it was uncertain value contained in something. Something that contains the value (vehicles) there are four kinds, namely: exercise, behavior, attitude and basic.

The ability of teachers to teach character education in schools, then it is as has been done by previous researchers (Mayer et al, 2004; Chan, 2011; Skaalvik & Skaalvik, 2013; Kopnina, 2013; Mills & Quinn, 2013; Twigg, et al, 2013), that it is very necessary to understand the current situation, both the students and in schools. This is important because with a good understanding by teachers when giving lessons at school, where in the subjects contained values of character education to be achieved, then it implies that the teacher had been giving a good understanding for students to how it should be in learning and this can be done from early childhood education. Even the results of the study by Mayer, et.al. (2004) confirmed that with a good understanding of character education for students, it actually has positioned the student is in equilibrium Emotional Intelligence (EI) is good.

Character education in the era of globalization, not only apply to students who are in the urban areas alone or in schools that have students who are heterogeneous, but also applies to all education in all areas. It's like the results of research by previous researchers (Hannum et al, 2013; Sargent et al, 2013; Scherrer, 2013; Twigg, et al, 2013), stated that education in areas far from the city also still need to obtain and understand the importance of character education in schools. However, to schools located far from urban areas, where the culture is still strong upheld as a norm of life. Then teaching character education will not be as difficult as teaching it to students in urban areas, where the mindset and plurality in everyday life may influence the development of personality and behavior of students.

Educational leadership which in this case is the principal, is also a study of the implementation of character education. It's like the results of research by previous researchers (Shockley, 2008; Mills & Quinn, 2013; Greenberg et al, 2007; Kalargyrou, 2012) is that as a leader of education, the principals should be able to look at the diversity of cultures that exist at the school, both from the students and the school environment, so that the school can position its existence on the situation and the conditions required by the needs of the students, not only in schools alone, but will be taken on a social life outside of school.

10. Challenges of Multicultural Education in the Globalization on ASEAN Economic Community

The changes that occur today as the impact of scientific and technological advances as well as the influx of globalization bring multidimensional effect. So it takes a learning approach and a multicultural model with a global perspective to meet the demanding needs of learners, communities and employment in a globalized world.

Global perspective is a perspective or way of thinking to a problem, event or activity from a global perspective, ie from the side of the world or international interest. Therefore, the attitude and actions are also directed to global interests. According Kieu & Chau (2000), the challenge of education in global perspective, one of which is an understanding of multicultural education is not racist to prepare and support the process of intercultural learning, social development and if necessary class action.

Thus, the world of education in an era of economic society Asean must understand the issues and global issues such as cultural diversity, political, economic, social, conflict and peace, interdependence among nations in the world, human rights, environmental issues such as environmental degradation, disease and migration and others. Banks (2008) argued for the five dimensions that are related to each other must be understood within the meaning of multicultural education, such as: 1) content integration; integrating different cultures and groups to illustrate basic concepts, generalizations and theoretical subjects/ disciplines; 2) the Construction Knowledge Process; bring learners to understand the cultural implications into a lesson; 3) an Equity Paedagogy; to adjust teaching methods by learning to learners. This is done in order to facilitate a student's academic achievement ranging from racial, cultural and social; 4) prejudice reduction; identify the characteristics of the race and determine the methods of education of students; and 5) train learners to berfartisipasi in sports activities and interact with the entire staff and students of different ethnicity and race in an effort to create a culture of academic.

Thus, education can bring multicultural education capable of creating a society that is educated and uneducated, not a society that is away from the social and cultural reality. Therefore, although the multicultural education in asean economic community level requires an approach that is considered more appropriate for asean heterogeneous society, especially in the period of autonomy and decentralization.

Having seen the conditions that exist in the ASEAN community, then multicultural education in the era of

globalization is currently facing three fundamental challenges: *first*, hegemony phenomenon that occurs in the world of education due to the tug of war between excellence and affordability. Learners in schools segregated according socioeconomic background, religion and ethnicity. *Second*, the curriculum is based on gender, social economic status, local culture and geography. This indicates imbalance and bias that restricts awareness of multicultural students. *Third*, the teacher. Feasibility and competence of teachers is needed to manage learning multiculturalism.

Therefore, in order to multicultural education for ASEAN community can be implemented properly, be aware of the various aspects, such as: 1) a multicultural curriculum, 2) teachers, 3) learning process, and 4) evaluation of learning process by using a multicultural approach. *First*, in regards with a multicultural curriculum. According Tilaar (2004), curriculum model that can be used in multicultural education curriculum includes "official" and "the hidden curriculum", ie unwritten curriculum and planned, but the process of internalization of values, knowledge and skills would occur among the learners. In the official curriculum, multicultural education should be integrated with all subjects and activities across the curriculum. Instead, insight multiculturalism is not included as an additional burden as a new subject in the curriculum that is already very heavily felt by teachers and learners. Therefore, the model multicultural curriculum should be able to integrate the learning process values, knowledge and skills "live" in a multicultural society, such as: skillfully negotiate, express and confront differences, conflict resolution, cooperative learning and problem solving. Making of the value of education, knowledge and skills can be designed according to the stages of child development and education. Charges multicultural values need to be designed in a learning process strategy that encourages the internalisation of values.

Second, in regards with the teacher. Curriculum development with a multicultural approach must be preceded by a good socialization, to enable teachers to develop curriculum in the form of syllabus and lesson plans, classroom learning and evaluation in accordance with the principles of multiculturalism. This is due to a major determinant of educational success multikultural are teachers. Therefore, teachers should be familiar with the characteristics of multikultural education so as to develop the curriculum multikultural in learning activities which they are responsible. Thus, a teacher through a multicultural approach must be flexible, because to teach in multicultural community in ASEAN, consideration cultural differences are important things that must be the teacher's attention. Factors such as: building the paradigm of diversity inclusive and moderate in school, respect the diversity of language, build a sense of gender sensitivity, build critical understanding of the inequalities and differences in social status, build anti-discrimination ethnic, appreciate their different abilities and appreciate the differences in age must be packed in the realm learning and awareness in schools, so as to create a notion to understand and accept all the differences that exist in every individual learners and in the end the students are expected to have a strong character to be a democratic, pluralist and humanist.

Third, in regards with learning process. The learning process developed should put learners in the surrounding social reality. That is, the learning process that relies on students to learn in groups and compete in groups in a competitive situation positive. In this way, the differences between individuals can be developed as a strength and a group of students used to live with a variety of diverse cultural, social, economic, intellectual and political aspirations. The learning process can be developed, for example: cooperative learning, problem solving, inquiry, etc.

Fourth, in regards with evaluation of learning process by using a multicultural approach. Evaluation used should include all aspects of learners' abilities and personality in accordance with the purpose and content developed. Evaluation tools are used not only to measure learning outcomes (achievement), complete tetapai provide clearer information about the learning process. The use of alternative assessments are considered attempts to integrate the activities of measurement of learning outcomes with the overall learning process, even the assessment itself is an inseparable part of the whole learning process. Performance assessment, portfolio assessment, public assessment, observation guidelines, interview guides, rating scale, the scale of attitudes, check lists, questionnaires and so on as an assessment tool that can be used to evaluate the learning that uses a multicultural approach.

11. Challenges for the Teacher in the Complexity of Education

Examine the dynamics of education in the era of globalization this time then there are three things that are interesting to observe, namely: 1) the role of teacher professionalism as an educator; 2) neoliberalism education; and 3) education in the era of globalization. Those three things, means that education rests on teachers. It also means that teachers engage themselves professionally in educational activities, ground-floor activities of certain kind. The teach in various ways: they set tasks for pupils, they try to motivate pupils, to help them, to control

their performances, and to improve their understanding and skills.

First, with regard to the professionalism of teachers. It is inevitable that the quality of education is determined by a variety of interrelated factors. Where the factors that determine the education process in a school is located in the dynamic elements that exist in the schools as well as the environment as a unified system. One such element is the teacher as the leading actors in the implementation of education at the institutional level and instructional. Observing that the role of the teacher in relation to the quality of education, at least can be seen from the four dimensions, namely as a private teacher, the teacher as an element of the family, as an element of teacher education, and teachers as part of the community.

The teacher as a person, then it is self-realization with all the unique characteristics that correspond with the position as stakeholders teaching profession. Thus, teachers must be able to know himself and is able to develop towards the realization of healthy personal and plenary (fully functioning person).

Teacher as an element of the family, the teacher role is to build a strong family so that it becomes the foundation for its performance in exercising its functions as a component of teacher education. To realize a strong family life, it should be supported among others by: a strong religious foundation, adjustment healthy marriage, the atmosphere and the inter relationship between family harmony, economic prosperity was good, and the pattern of effective family education.

Teachers as elements of education, the teacher's role in the overall educational activities at the operational level, is a determinant of educational success, where as an educator in the school, teachers do the tasks education performance in the guidance, instruction, and training. All activities are strongly associated with the development efforts of the learners through the example, the creation of a conducive educational environment, guide, teach, and train learners.

Teacher as an element of society, it is the teacher's role as mediators between society and education, especially in schools. In this regard, the teacher will lead and develop a variety of educational efforts in schools into life in society, and also brought public life to a school, so the teacher's role in efforts to develop educational get a place of concern in the community or the environment.

Second, neoliberalism education. As a consequence of the development of global free trade, one of the challenges faced by the world of education is their propensity to make education as a commodity that makes its development is a pattern of privatization, which transfer the waiter education to the private sector, and commercialization, ie applying the patterns of the market approach in institutions public. In view of the level of education as a commodity, will cause a shift that makes education an elitist, which can be interpreted only be enjoyed by the certain course that is able to pay, when it should be the education it populist that should be enjoyed by everyone in accordance with their own right. Thus it can be interpreted that the first function of education in human society, in point of time, is to direct and Accelerate learning in such a way that the rising generation will be well prepared for adult life.

Third, education in the era of globalization. It should be observed with regard to the present era of globalization, is about multicultural education, that multicultural education is the transmission of values, knowledge, attitudes, and behaviors directed against an individual or group within a society, so that while respecting the cultural diversity that comes from ethnic differences , religion, culture, language, and region, and at the same time support the policy agreed. Referring to these conditions, the role of teachers in multicultural education needs to be interpreted as a manifestation of the educational strategy still emphasizes harmony and harmony situation and condition of the school and the community dynamic in all areas, which require teachers who understand well acculturation local circumstances. In the present era of globalization, the development of the teachers not only on aspects of intellectual ability, but also on the ability of social interaction, religious, as well as an understanding of the development of science and technology, so that it can think and act concretely in accordance with its responsibilities as education.

Interpret the above explanation, the education in ASEAN can continue to compete in quality improvement, and especially on the role of the educator or teacher can position as a person who has self understanding, has self-acceptance, has self direction, and self realization, so their role can be maximized as an educator. If it is so then the teacher is a person who can be as a role model.

12. Role of the School Principal

The principal's role in leading the school has three functions, namely as leaders and managers in the field of education in schools they lead; as school leaders to menakodai the wheels of school organization and produce top students and virtuous character well; and as the protector of all citizens of the school in order to jointly work

together to promote education in the school. This condition is also as stated by John C. Maxwell in Simon (2010: 16) that in order to progress in the leadership of the school, the principals need to prioritize the interests of the school. The true leader is serving, that is to serve others, serve their interests, and in doing so will not always be popular, not always impressive. Opinion was also in line with that set forth in Mulyasa (2011: 67) that simply school leadership can be interpreted as a way or business principals to influence, encourage, guide, direct, empower and mobilize teachers, staff, students, parents of participants students, school committee, board of education, and other relevant parties, to achieve the goal of character education.

With regard to his leadership, the school principal as a leader as well as managers in the implementation of character education in schools, and the teacher is a leader and manager in the implementation of character education in the classroom (Wiyani, 2012: 68). The school principal giving instructions to teachers to lead and manage students through the transformation of the noble values based on the existing rules and peculiarities of educational values that exist in the school. Against this also as stated World Bank (1999) in Rival & Murni (2009: 789) "Give people a handout or a tool, and they will live a little better. Give them an education, and they will change the world ". Against this, the principals at the schools need to emphasize to teachers to prepare a lesson plan with good character and include indicators to be achieved in the learning.

13. Role of Teachers in Classroom Level

Teacher plays a very strategic especially in shaping the character and developing students' potential. The existence of a reliable teacher at the school, both behaviorally and academically during the learning will position the teacher as someone who eligible to become as a role model and imitated. At the school in general, the role of the teacher as a role model will be very visible. This is because the school teacher is a source of knowledge for students. Character development is not only limited in the habit of advising students. Characters just formed by the contiguity quality of personality in the process of learning together (Noor, 2012: 124).

At the level of the class, the teacher is an important factor that is big influence on the success of character education in schools, even critical to the success of students in developing personal intact (Mulyasa, 2011: 63). Say so, because teachers are the main figures and examples and role models for students. Therefore, in character education teachers should start from himself to anything he does well be good anyway influence on students.

Teachers at the level of the classroom and the school also served to provide exemplary early students. Their exemplary and discourse exemplified by the principal at his school, and it is also in line with that proposed by Dakir (2010: 101): "... Planting sense of right and further that such measures can be implemented, it is expected for learners will have an attitude, then the value, and eventually formed a personality who religious".

With regard to the preparation of lesson plan, the teacher in this case must be carefully and professional character values that can be achieved by the students. In this, the teacher should also be able to integrate the condition of schools on learning done in class, so the lesson plan that has been prepared by teachers and approved by the school principal can be performed well. Against this, Fitri (2012: 46) also suggests that the strategy of character education can be seen in four of integration, namely: 1) integration into subjects, 2) integration through thematic learning, 3) integration through the creation of an atmosphere in character and habituation, 4) integration through extracurricular activities, 5) integration between school education programs, families, and communities.

On the other hand, the role of parental involvement is a necessity in the school to support the implementation of character education programs, as well as one of concern from school to help cope with the students who have problems, so that problems can be solved and students can learn and achieve in school the. It also points out Hamalik (2010: 183) that teachers play a major role and is responsible for guiding the students to develop their potential and help solve problems and difficulties, with the intention that the student is able to independently guide him/herself.

14. Problem of Quality Education

To understand the issue of quality in education it will be easier for us if we look at education as a system with all its interdependent components: inputs, process, outputs and feedback. Under the inputs we have students as raw inputs and curriculum, learning materials, teachers, principals and other educational resource persons, learning facilities and environment as instrumental inputs. The second component, process, is where all inputs interact in the process of teaching-learning to reach educational goals and objectives. The third component, output, is the product of the interaction among the inputs, which can be seen from the student's improved performances in terms of cognitive, affective, psychomotor domain. Feedback mechanism is another important component of the education system that will give us information on how the system succeeds or fails in achieving goals and

objectives.

Quality in education cannot be seen from the output or student learning achievement only, but from other components as well. If we follow the Dakar's Framework of Action, then the definition of quality is no longer focused only on teaching learning and the classroom. A good quality multicultural education requires: 1) healthy, well nourished and motivated students; 2) well motivated and professionally competent teacher; 3) active learning techniques; 4) a relevant curriculum; 5) adequate, environmentally friendly and easily accessible facilities; 6) healthy, safe and protective learning environments; 7) a clear definition and accurate assessment of learning outcomes, including knowledge, skills, attitude and values; 8) participatory governance and management; and 9) respect for and engagement with local communities and cultures. (World Education Forum Drafting Committee, 2000).

We cannot expect to have good quality education if the students are not healthy, malnourished, going to school with empty stomachs. Their basic need for food will decrease their attention and motivation from learning. The significant number of people living below the poverty line in the region needs real actions if we really want to improve the quality of education.

Teachers are essential players in promoting quality education. Well trained, highly motivated, dedicated and professionally competent teachers are very important. This is strongly related to the financial reward they get from their profession as teachers. What is important in improving the quality of education is not only having enough number of teachers in school and class, but enough number of good quality teachers which are highly motivated and dedicated to their jobs. This region has a shortage of teachers both in number and quality. In most of the countries, teaching is not an attractive profession financially.

Indonesia has made significant progress in expanding access to primary and secondary schooling in the past ten years. In contrast to access gains, quality improvement has been broadly disappointing. In particular, there appear to be serious urban-rural quality gaps. Roughly one-half of primary school teachers have had little professional training; only two-thirds have completed lower secondary schooling.

The teaching learning process should put the students as subject not as an object. Students must be active in learning and they should not only learn about subject matters but also to learn how to learn. Teachers should play their new role in preparing students for an emerging knowledge-based and technology-driven economy. It is unrealistic to expect the low quality and less dedicated teachers to perform this new role.

A relevant curriculum, which addresses the need of students, community and work place, should be used in good quality education. In most of the countries it is considered that curriculum is overloaded and should be reformed. Mismatching between what students learn at school and what the community or world of work demands is also an issue to address. This is the irrelevant curriculum and teaching learning process that contribute to the widening gap between education institutions and world of work, and finally contributes to increasing unemployment rate.

In majority of the countries we are still lacking learning facilities such as textbooks, libraries, laboratory, and other learning materials both in number and quality. For example, most schools in the more developed rural areas lack of the teaching equipment required by standardization of the Ministry of Education, Libraries remain poorly stocked and out of date. Many schools are yet to get a science laboratory (Finn, et al, 2003).

Not all schools and classrooms in our education institutions are healthy and conducive enough to promote excellence in learning. We need a better governance of education systems that is efficient, accountable, transparent and flexible so that they can respond more effectively to the diverse and continually changing needs of learners and community.

15. Closing

Globalization is a powerful influence and appears on the dynamic development of education in school, and has also made its way into educational policy in the countries of the ASEAN region in general and the national level. Another aspect that poses as a challenge to educators relate with multicultural education is the continuity and consistency of messages that children receive between school and home. In this context, it is vital that families and parents themselves are supportive of the ethos of multiculturalism so as not to contradict or work against what is being learned in schools. Families sometimes inadvertently, consciously or unconsciously, contribute to children's bias and prejudice towards people of other cultures. They do this in three main ways: direct tuition, indirect tuition and role-learning. In direct tuition, parents and other family members tell children what is "right" and what is "wrong"; what they should say and do in specific situations. Indirect tuition occurs unintentionally when children spontaneously imitate a family member's behavior, while role-learning involves teaching children

who they are and how to behave towards others and an understanding of the roles of others.

From all of the above it can be concluded that there are entering the era of the ASEAN Economic Community (AEC) today as globalization brings attention to the area of scrutiny for education in the ASEAN Countries in particular, which give more attention such as: *first*, the power of the ASEAN community one of them is because of the complexity. This diversity, on the one hand is a blessing, because it actually reflects the pluralism wealth of cultural treasures. But on the other hand, a plurality also has great potential for growing proliferation of conflicts, particularly if such diversity is not able to run well.

Second, to build a society that acknowledges and respects differences educational process is required. And multicultural education to be very strategic to be able to manage the plurality creatively. It should multicultural education is a process of internalization of the values of multiculturalism itself in educational institutions.

Third, the education in the era of the ASEAN economic community must understand the issues and global issues such as cultural diversity, political, economic, social, conflict and peace, interdependence among nations in the world, human rights, environmental issues such as environmental degradation, disease and migration of the population and so forth.

Fourth, In order for multicultural education in ASEAN can be implemented properly, it must pay attention to various aspects, among others: a multicultural curriculum, teaching staff (teachers), the learning process and evaluation of learning by using a multicultural approach

Multicultural education in the ASEAN economic community should be carried out by the forward four principles: sincerity, honesty, openness, and comitmmment themselves. With the meaning of these four ASEAN nations will be able to implement multicultural education that is based on the absence of adverse interests of other nations, and it can be a learning experience for the nations outside ASEAN to live in unity and peace.

References

- Agrawal, T. (2013). Educational inequality in rural and urban India. *International Journal of Educational Development*, (34), 11-19.
- Balyer, A. (2012). Transformational Leadership Behaviors of School Principals: A Qualitative Research Based on Teachers' Perceptions. *International Online Journal of Educational Sciences*, 4(3), 581-591.
- Banks, J. A. (2004). *Multicultural Education: Historical Development, Dimensions, and Practice*. San Francisco: Jossey-Bass.
- Banks, J. A. (2008). *An Introduction to Multicultural Education* (4th ed.). Boston: Pearson Education.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership* (2nd ed.). New York: Routledge.
- Bokhorst-Heng, W. (2007). Multiculturalism's Narratives in Singapore and Canada: Exploring a Model for Comparative Multiculturalism and Multicultural Education. *Journal of Curriculum Studies*, 39(6), 629-658. <https://doi.org/10.1080/00220270701506324>
- Burbules, N. C., & Torres, C. A. (2000). *Globalization and education: Critical perspectives*. New York: Routledge.
- Camicia, S. P. (2009). Identifying Soft Democratic Education: Uncovering the Range of Civic and Cultural Choices in Instructional Materials. *Social Studies*, 100(3), 136-142. <https://doi.org/10.3200/TSSS.100.3.136-142>
- Chan, A. (2011). Critical multiculturalism: Supporting early childhood teachers to work with diverse immigrant families. *International Research in Early Childhood Education Journal (Online)*, 2(1), 63.
- Charlesworth, Z. (2008). Learning styles across cultures: suggestions for educators. *Education and Training*, 50(2), 115-127. <https://doi.org/10.1108/00400910810862100>
- Creswell, J. W. (2009). *Research Design. Qualitative, Quantitative, and Mixed Method Approaches*. Los Angeles: SAGE Publications, Inc.
- Dakir, H. (2010). *Planning and Curriculum Development*. Jakarta: Rineka Cipta.
- DES. (1985). *Education for All: Report of the Committee of Inquiry into the Education of Children from Ethnic Minority Group (The Swann Report)*. Department of Education and Science, Cmnd 9453, London, HMSO
- Duke, N. K. (2000). For the Rich It's Richer: Prints Experiences and Environments Affered to Children in Very Low and Very High Socioeconomic Status First Grade Classroom. *American Educational Research Journal*, 37(2), 441-478. <https://doi.org/10.3102/00028312037002441>

- Epstein, J. L., Sanders, M. G., Salinas, K., Simon, B., Vanvoorhis, F., & Jansoon, N. (2002). *School, Family and Community Partnership: Your Handbook for Action* (2nd ed.). California: Corwin.
- Erik, M., Hines, L., DiAnne, B., Laura, M. G., Gonzalez, J.V., & Alia, H. (2014). Parental involvement in college planning: Cultural considerations when working with African American families. *Journal for Multicultural Education*, 8(4), 249-260. <https://doi.org/10.1108/JME-06-2014-0025>
- Finn, J. D., Pannozzo, G. M., & Achilles, C. M. (2003). The “Why’s” of Class Size: Student Behavior in Small Classes. *Review of Educational Research*, 73(3), 321-368. <https://doi.org/10.3102/00346543073003321>
- Fitri, A. Z. (2012). *Character Education Based Values & Ethics in Schools*. Jogyakarta: Ar-Ruzz Media.
- Fullan, M. (2007). *New Meaning of Educational Change*. New York: Teachers College Press.
- Gardner, R., Karakasoglus, Y., & Luchtenberg, S. (2008). Islamophobia in the Media: A Response from Multicultural Education. *Intercultural Education*, 19(2), 119-136. <https://doi.org/10.1080/14675980801889658>
- Gollnick, D., & Chinn, P. (1990). *Multicultural Education in a Pluralistic Society* (3rd ed.). New York: Macmillan.
- Gorski, P. C. (2005). *Multicultural Education and the Internet* (2nd ed.). New York: McGraw-Hill Higher Education.
- Gorski, P., & Pothini, S. (2014). *Case Studies on Diversity and Social Justice Education*. New York, NY: Routledge.
- Greeberg, D. N., Clair, J. A., & Maclean, T. L. (2007). Enacting the Role of Management Professor: Lessons from Athena, Prometheus, and Asclepius. *Journal Management Education*, 6(4), 439-457.
- Hallinger, P. (2003). Leading Educational Change: Reflections on the Practice of Instructional and Transformational Leadership. *Cambridge Journal of Education*, 33(3), 35-70. <https://doi.org/10.1080/0305764032000122005>
- Hamalik, O. (2010). *Management Curriculum Development*. Bandung: Remaja Rosdakarya.
- Hannum, E., Liu, J., & Frongillo, E. A. (2013). Poverty, food insecurity and nutritional deprivation in rural China: Implications for children’s literacy achievement. *International Journal of Educational Development*, (34), 90-97.
- Hermino, A. (2014). *Educational Leadership in the Globalization Era*. Jogyakarta: Pustaka Pelajar
- Hermino, A. (2016). *Anger Management for Student. Theoretical and Practical Studies in the Educational Management*. Jogyakarta: Pustaka Pelajar.
- Hoffman, D. M. (1996). Culture and Self in Multicultural Education: Reflections on Discourse, Text, and Practice. *American Educational Research Journal*, 33(3), 545-569. <https://doi.org/10.3102/00028312033003545>
- Jayne, M. Le., Maike, G., & John, A. G. (2015). Navigating the Development of Pre-Service Teachers’ Intercultural Competence and Understanding of Diversity: The Benefits of Facilitating Online Intercultural Exchange. *Journal for Multicultural Education*, 9(2), 98-110. <https://doi.org/10.1108/JME-12-2014-0042>
- Kadarusmadi. (1996). *Parents Efforts in Reforming Education Situation in the Family*. Unpublished Dissertation. Bandung: Postgraduate. IKIP Bandung.
- Kalargyrou, V., Pescosolido, A. T., & Kalargiros, E. A. (2012). Leadership Skills in Management Education. *Academy of Educational Leadership Journal*, 16(4), 39-63.
- Kieu, T., & Chau, N. H. (2000). Education in Vietnam. *Journal of SEA Education*, 1(1), 219-241.
- Kopnina, H. (2013). Schooling the World: Exploring the critical course on sustainable development through an anthropological lens. *International Journal of Educational Development*, (62), 220-228. <https://doi.org/10.1016/j.ijer.2013.10.002>
- Loomis, S., Rodriguez, J., & Tillman, R. (2008). Developing Into Similarity: Global Teacher Education in The Twenty-First Century. *European Journal of Teacher Education*, 31(3), 233-245. <https://doi.org/10.1080/02619760802208288>
- Mason, M. (2013). Educational inequality and educational quality. *International Journal of Educational Development*, (34), 1-2.

- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional Intelligence. Theory, Findings, and Implications. *International Journal of Psychological, 15*(3), 197-215.
- McAlpine, L., & Amundsen, C. (2011). *Doctoral Education: Research-Based Strategies for Doctoral Students, Supervisors and Administrators*. New York: Springer. <https://doi.org/10.1007/978-94-007-0507-4>
- McGill, J. (2013). International Student Migration: Outcomes and Implications. *Journal of International Students, 3*(2), 167-181.
- Mertens, D. M. (2010). *Research and Evaluation in Educational and Psychology* (3rd ed.). California: SAGE Publications, Inc.
- Mills, M. K., & Quinn, A. J. (2013). Innovation in the Teaching of Sustainability in the Business Classroom Via a Combined model of Experiential Learning, Reflective Practice and Metaphor. *International Journal of Organisational Behaviour, 17*(3), 4-7.
- Misco, T. (2007). Using Curriculum Deliberation to Address Controversial Issues: Developing Holocaust Education Curriculum for Latvian Schools. *International Journal of Education Policy and Leadership, 2*(8).
- Mitaray, S. (2000). Education in the Lao People's Democratic Republic: Challenges in the New Millennium. *Journal of Southeast Asian Education, 1*(1).
- Moolenaar, N. M., Daly, A. J., & Slegers, P. J. C. (2010). Occupying the Principal Position: Examining Relationships Between Transformational Leadership, Social Network Position, and Schools' Innovative Climate. *Educational Administration Quarterly, 46*(5), 623-670. <https://doi.org/10.1177/0013161X10378689>
- Mulyasa, H. E. (2011). *Character Education Management*. Jakarta: Bumi Aksara.
- Ndraha, T. (1997). *Organizational Culture*. Jakarta: Rineka Cipta.
- Noor, R. M. (2012). *The Hidden Curriculum. Building Character through Extracurricular Activities*. Yogyakarta: Pedagogja.
- Northouse, P. G. (2001). *Leadership Theory and Practice* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Peng, W. J., McNess, E., Thomas, S., Wu, X. R., Zhang, C., Li, J. Z., & Tian, H. S. (2013). Emerging Perceptions of Teacher Quality and Teacher Development in China. *International Journal of Educational Development, 34*(1), 58-66.
- Rama, C. (2015). Cultural and Functional Diversity in the Elementary Classroom: Strategies for Teachers. *Journal for Multicultural Education, 9*(2), 54-67. <https://doi.org/10.1108/JME-03-2015-0010>
- Reeves, D. B. (2006). *The Learning Leader: How to Focus School Improvement for Better Results*. Arkansas: ASCD.
- Rivai, V. H., & Murni, S. (2009). *Education Management. Analysis Theory and Practice*. Jakarta: Rajawali Pers.
- Rodriguez, F. (2014). A Community College District Chancellor's View on Transformational Leadership. *Journal of Transformative Leadership and Policy Studies, 4*(1).
- Sargent, T., Kong, P., & Zhang, Y. (2013). Home environment and educational transitions on the path to college in rural northwest China. *International Journal of Educational Development, 34*(1), 98-106.
- Schein, E. (1985). *Organizational Culture and Leadership: A Dynamic View*. San Francisco, CA: Jossey - Bass.
- Scherrer, J. (2013). The Negative Effects of Student Mobility: Mobility as a Predictor, Mobility as a Mediator. *International Journal of Education Policy and Leadership, 8*(1).
- Shockley, K. G. (2008). Africentric Education Leadership: Theory and Practice. *International Journal of Education Policy and Leadership, 3*(3).
- Simon, M, BHK. (2010). *Magazine OIKOS: To Services in Leadership*. Malang: AXA Creative Design.
- Skaalvik, E. M., & Skaalvik, S. (2013). Teachers' Perceptions of The School Goal Structure: Relations with Teachers' Goal Orientations, Work Engagement, and Job Satisfaction. *International Journal of Educational Development, 62*(1), 199-209. <https://doi.org/10.1016/j.ijer.2013.09.004>
- Slavin, R. E. (2006). *Educational Psychology Theory and Practice*. Boston: Pearson.
- Soutworth, G. (2002). Instructional Leadership in School: Reflection and Empirical Evidence. *School Leadership and Management, 22*(1), 73-92. <https://doi.org/10.1080/13632430220143042>

- Spodek, B. (1982). *Handbook of Research in Early Childhood Education*. New York: Macmillan Publishing Co., Inc.
- Stromquist, N. (2002). *Education in a Globalized World: The Connectivity of Economic Power, Technology, and Knowledge*. New York: Routledge.
- Tatto, M. T. (2006). Education Reform and The Global Regulation of Teachers' Education, Development, and Work: A Cross-Cultural Analysis. *International Journal of Educational Research*, 45(4-5), 231-241. <https://doi.org/10.1016/j.ijer.2007.02.003>
- Tilaar, H. A. R. (2004). *Multiculturalism; Global Challenges in Transforming the Future of Education*. Jakarta: Grasindo.
- Torres, C. A. (2002). Globalization, Education, and Citizenship: Solidarity versus Markets? *American Educational Research Journal*, 39(2), 363-378. <https://doi.org/10.3102/00028312039002363>
- Twigg, D., Pendergast, D., Fluckiger, B., Garvis, S., Johnson, G., Robertson, J. (2013). Coaching for Early Childhood Educators: An insight into the effectiveness of an initiative. *International Research in Early Childhood Education Journal*, 4(1), 73.
- Wiyani, N. A. (2012). *Character Education Management. Concept and Implementation in Schools*. Yogyakarta: Pedagogia.
- World Education Forum Drafting Committee. (2000). *Education For All: Meeting Our Collective Commitments, Expanded Commentary on the Dakar Framework for Action*. Paris.
- Yuan, W. (2011). Academic and Cultural Experiences of Chinese Students at an American University: A Qualitative Study. *International Communication Studies*.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

“Civilization and Its Discontents”—A Reappraisal

Siegfried Zepf

Correspondence: Siegfried Zepf, Institute of Psychoanalysis, Psychotherapy and Psychosomatic Medicine of the University of Saarland, Germany. E-mail: s.zepf@rz.uni-sb.de

Received: January 23, 2017

Accepted: February 14, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p93

URL: <https://doi.org/10.5539/ass.v13n4p93>

Abstract

The author questions the extent to which Freud's theory of culture can justify Freud's postulated claim concerning the social causation of neuroses. Since the premises on which Freud bases his cultural theory are untenable, it is argued that this justification cannot be supplied by it. This is followed by an examination of Freud's arguments against historical materialism, and a further reasoned rejection of those objections Freud did not withdraw. Finally, in the author's proposing to open psychoanalysis onto historical materialism, Freud's concept of sexual instincts is deciphered in the light of Laplanche's considerations as a naturalistic mystification of the unconscious. With this opening, the contradiction between conscious and unconscious objectives in neuroses appears abstractly as a manifestation of the contradiction of subjects in which society finds itself. In closing, the need for a meta-theoretical mediation of psychoanalytic insights and historical materialistic knowledge in making a concrete analysis of the social conditions of neuroses is emphasised.

Keywords: Freud's theory of culture, historical materialism, meta-theory

If anyone were in a position to show in detail the way in which ... the general inherited human disposition, its racial variations and its cultural transformations—inhibit and promote one another under the conditions of social rank, profession and earning capacity—if anyone were able to do this, he would have supplemented Marxism so that it was made into a genuine social science.

Sigmund Freud (1933, p. 179)

Freud's essay *Civilization and its Discontents*, in which he designs a theory of culture, was published more than 85 years ago. Guided by his (1910, p. 147) statement that “we point out to it [society] that it itself plays a great part in causing neuroses,” I will reconsider in this essay to what extent Freud's theory of culture is suited to clarifying the social causation of neuroses.

As there is an increase in psychic disturbances (e.g. Spiegel-online, 15.2.2011; Whitaker, 2010), the need for such a theory is at least as relevant as it was in Freud's day. The object of psychoanalytic investigations is the inner world of an individual's representations, and it is the history of the inner world that psychoanalysis seeks to unravel. As this method of investigation is tied to language—“Nothing takes place in a psycho-analytic treatment but an interchange of words between the patient and the analyst” (Freud, 1916-17, p. 17)—the objective conditions under which this inner world is built up transcend the psychoanalytic method. Linguistic statements are not isomorphic copies of reality. Notwithstanding Freud's dictum that psychoanalysis proves to society its role in causing neuroses, it is obvious that psychoanalysis is neither able to determine the objective social conditions in which the patient lives, nor provide this proof by itself. Psychoanalysis can show through historical analysis *how* the processes evolved in which psychic structures were formed. However, all such processes occur under certain social conditions that are beyond its method. By answering the questions of how these psychic structures are formed and what is left in the unconscious, the scope of psychoanalysis ends. If psychoanalysis enquires into the causal reasons concerning *why* certain structures were formed, it arrives in an area where answers must be given by social theory.

However, psychoanalytic knowledge cannot be related to any sociological insights. Following Fromm (1932), knowledge of the relationship between social and psychic processes requires a social theory that coincides structurally both in its basic assumptions and its methods of acquiring knowledge with the psychoanalytic conception of its subject. Psychoanalysis reconstructs the inner life of individuals historically, i.e. as a product necessary for processing instinctual wishes that were frowned upon in primary socialisation. Their rejection by relevant figures leads to conflicts whose genuine shapes are withdrawn from consciousness via defensive

operations.

As a therapy psychoanalysis is designed to be both historical and critical, while, about the instincts, it assumes that human behaviour is determined by conditions for which human beings are not responsible, but which are found at their birth and to which they are delivered. A social theory adequate to psychoanalysis should therefore explain the existing social structure historically as having developed out of the existential conditions of human beings and as resulting from conflicts between human groupings and the processing of such conflicts.

Freud developed such a theory of culture and society mainly in opposition to historical materialism, whose basic tenets will be outlined and discussed as critically as his own objections to it. This will be followed by a discussion of the attempts to combine psychoanalysis and historical materialism, by means of which I will underline that these attempts failed on account of Freud's theory of the instincts. Thereafter Freud's concept of instincts is questioned in the light of Laplanche's considerations and deciphered as a naturalistic mystification of the unconscious, in the context of which an elucidation of Freud's concept is provided which is compatible with the historical materialistic conception of the social determination of human behaviour.

1. Freud's Theory of Culture

Freud developed the essential features of his theory of culture and society in his essay *Civilization and its Discontents*. This essay was preceded by another paper entitled *The Future of an Illusion*, which I also investigate.

By "Human civilization," Freud (1927, pp. 5f.) understands "all those respects in which human life has raised itself above its animal status and differs from the life of beasts." Human cultural and social achievements include "all the knowledge and capacity that men have acquired in order to control the forces of nature and extract its wealth for the satisfaction of human needs" (ibid.), and "all the regulations necessary in order to adjust the relations of men to one another and especially the distribution of the available wealth" (ibid., p. 6). These facilities serve both the mastery of external nature as well as the self-domestication of the inner instinctual nature of man Freud conceives as anti-social. By anti-social he refers to the aggressive instinct conceptualised as the outward expression of the death instinct.

Because there are such anti-social trends, and because men are not spontaneously fond of work, the masses have to be ruled by a minority. In order not to lose their influence it seems necessary that this minority has the "means to power at their disposal" (ibid., p. 8). This minority is not subject to the compulsion to work and the renunciation of instincts to the same extent as the majority. Although the prohibitions of "incest, cannibalism and lust for killing" (ibid., p. 10) apply to all, there are restrictions that apply only to most people, so that "civilization is something which was imposed on a resisting majority by a minority" (ibid., p. 6). This minority bankrolls itself by the societally produced surplus value of the majority and has better access to cultural goods that permit a sublimation of the instincts. Therefore, the binding of the working majority and culture lacks plausibility.

A conflict between the minority and the majority is inherent to social organisation, since the majority envies the minority's prerogatives, rebels and "should develop an intense hostility towards a culture whose existence they make possible by their work, but in whose wealth they have too small a share" (ibid., p. 12).

Freud's cultural theory recapitulates the development of the individual. "The development of civilization," he states (1930, p. 96), "appears to us as a peculiar process which mankind undergoes, and in which several things strike us as familiar." This process is familiar to Freud, because the minority represents the parental figures while children are represented by the uncultured and instinct-driven majority who must be forced into culture via restrictions of their instinctual wishes. The individual super-ego appears in the concept of a cultural super-ego whose demands are "comprised under the heading of ethics" (ibid., p. 142).

Freud's emphasis on the "analogy between the process of civilization and the path of individual development" (ibid., p. 141) reveals that, in his understanding, cultural development unfolds itself on the same material basis as the ontogenesis of the individual: that of instinctual wishes. It further indicates that his theory of culture is historically designed, and that society develops out of the necessity to guarantee the survival of the species and the individual by controlling humanity's external as well as internal instinctual nature.

On pain of ruin, a resolution of the existing conflict is required because "a civilization which leaves so large a number of its participants unsatisfied and drives them into revolt neither has nor deserves the prospect of a lasting existence" (1927, p. 12). Furthermore, his theory of culture is critical because it evaluates social institutions and provisions by the suffering they inflict on many people, which Freud claims is responsible for the emergence of neuroses. Among these cultural restrictions are:

- “prohibition against an incestuous choice of object” (1930, p. 104), the
- “choice of an object is restricted to the opposite sex” (ibid.),
- “most extra-genital satisfactions are forbidden as perversions” (ibid.),
- “heterosexual genital love ... is itself restricted by ... insistence upon legitimacy and monogamy” (ibid., p. 105)
- sexuality is no liked “as a source of pleasure in its own right and is only tolerate[d] ... because there is so far no substitute for it as a means of propagating the human race” (ibid.)

Neuroses arise from a discrepancy between the “sexual constitution of human beings” and the cultural requirement “that there shall be a single kind of sexual life for everyone” (ibid., p. 104). From this requirement, which includes the claim that people also must deal similarly with their “aggressive instincts” (ibid., p. 112), it follows “that a person becomes neurotic because he cannot tolerate the amount of frustration which society imposes on him in the service of its cultural ideals” (ibid., p. 87).

As culture is a necessary prerequisite for human beings to live together and demands the suppression of instincts, it is the individual’s instinctual equipment which is ultimately responsible for the development of neuroses.

2. Objections to Freud’s Theory of Culture

Before addressing the question as to whether the discrepancy between cultural necessity and biological constitution can establish a social causation of neuroses, I will discuss the critical arguments addressed to Freud’s theory of culture.

First, I consider the objections which relate to Freud’s understanding of the instincts. It is noted that Freud’s justification of the aggressive instinct as the outward expression of the death instinct acting before its turn inside the person contradicts his definition of instincts, of which he was convinced throughout his scientific life. Instincts have a bodily state as both a source and an aim—the aim being the alteration of the bodily state so that an instinct becomes effective on its way from the source to the aim (1933, p. 96). Here he invokes the death instinct, the antagonist of Eros, “the task of which is to lead organic life back into the inanimate state,” while “a special physiological process (of anabolism or catabolism) would be associated with each of the two classes of instincts” (1923b, p. 41).

If the physiological dissimilation processes in the body are understood as the source of the death instinct, this understanding, as Fenichel (1945, pp. 59f.) points out, contradicts the definition of an instinct’s aim: The death instinct is not conceptualised as reversing the physiological dissimilation processes at its source, but on the contrary, it is itself supposed to carry out these dissimilation processes.

A way out of this contradictory situation appears to be suggested by the assumption that Eros and the death instinct are situated outside the framework of Freud’s definition of instincts. At the end of his life Freud conceived “*Eros*” and “*the destructive instinct*” as those “forces which we assume to exist behind the tensions caused by the needs of the id” (1940, p. 148; italics in the original), while the “instinctual impulses” we are able to trace reveal themselves as “derivatives” (1923a, p. 46), and as an “exponent” (1940, p. 151) of these “two basic instincts” (ibid., p. 148).

If we understand the two fundamental instincts, as Bibring (1936) argues, as general biological tendencies in man, we transport conceptually abstracted basic instincts (e.g. Gabbard, 2000) back into the individual and make them effective. As there is, in neither human nor non-human biological observations, nothing which could justify the assumption of a death instinct (e.g. Brun, 1953-54; Benedek, 1973), it are not aspects of human nature that are conceptualised in the abstractions of Eros and the death instinct. Rather, these concepts are materialised in nature with the consequence that, in the sexual instincts of the individual, it is not the concrete nature of human beings but only abstractions that appear.

Of the numerous strong criticisms of Freud’s natural-philosophical speculation (see e.g. Andreski, 1972; Becker, 1973; Braun, 1979; Colson, 1995; Holt, 1965; Jones, 1957, pp. 271ff.; Kapp, 1931; Lichtenstein, 1935; Penrose, 1931; W. Reich, 1933, pp. 210ff.) I will only mention that there is no scientific justification for a reduction of human nature to these two fundamental instincts. When applying Freud’s general definition of instincts, it reveals itself as contradictory; when read beyond this definition, it is not covered by empirical findings.

Other psychoanalysts have pointed to other problems of Freud’s concept of the death instinct. Cohen (1980), Eckstein (1949), Goodnick (1993), Wallace (1976), Werman (1985) and Wittels (1924) believe that this concept was not a scientific discovery but mainly arose from Freud’s biographical circumstances. The Great War had ended in 1918 leaving 17 million dead and 20 million wounded; in 1920 Freud’s beloved daughter Sophie died

of Spanish influenza; in 1923 Freud underwent his first operation for cancer of the palatal arch; and in the same year Sophie's son, Freud's favourite grandson Heinerle, died at four of tuberculosis. After his death Freud wrote to Kata and Lajos Levy in a letter dated 11 June 1923 (Freud, 1960, pp. 343f.): "I myself know that I have hardly ever loved a human being, certainly never a child, so much as him ... I find this loss very hard to bear. I don't think I have ever experienced such grief; perhaps my own sickness contributes to the shock. I work out of sheer necessity; fundamentally everything has lost its meaning for me."

However, Gifford (2007) and Jones (1957) object to this idea. Jones refers to a letter to Wittels of December 18, 1923 (*ibid.*, p. 43), in which Freud mailed a list of corrections to the biography Wittels had written of him containing the following passage: "I certainly would have stressed the connection between the death of the daughter and the concepts of the Hereafter in any analytic study on someone else. Yet still it is wrong. The Hereafter was written in 1919, when my daughter was young and blooming, she died in 1920 ... Probability is not always the truth". Yet Schur (1972, p. 332) tells us that Freud used the term "death instinct" as early as 1920 in a letter to Eitington shortly after Sophie's death, and Grubrich-Simits (1992, pp. 240-243) points out that the decisive sixth chapter of the final version of *Beyond the Pleasure Principle*—in which the death instinct is first postulated—was added after the death of Sophie. This might allow us to read Freud's assertion in his letter to Wittels as a denial in which he tells the truth by negation.

Furthermore, Werman (1985) argues that Freud conceptualises the ratio of culture and aggression contradictorily. Were the main task of culture to inhibit aggression, the outward expression of the death instinct, the consequence would be the self-destruction of the individual and thus the demise of the species. But if culture, in order to prevent this consequence, were to support the outward expression of the death instinct, individuals would mutually destroy themselves and the species would also be doomed. This contradiction, which Freud might himself have suspected, cannot be resolved by the assumption that a culture can not only tolerate but even foster an outwardly directed death instinct to fight other cultures (Freud, 1930, p. 113). Ultimately, such cultures would mutually destroy themselves and the human species would also be consigned to extinction.

But even if one wants to hold on to Freud's understanding of culture and substitutes for an outwardly directed death instinct an independent aggressive instinct—an assumption which Freud (1909, p. 140) rejected—the problem remains. Such an instinct would also not fit into Freud's general definition of instincts. As Brenner (1971) and Anna Freud (1972) noted, a somatic source of such an independent aggressive instinct could never be determined.

A further set of objections relates to Freud's understanding of culture.

- Freud's thesis that the majority is forced into a greater renunciation of instinctual satisfaction than the minority is put into question. Like the minority, the majority also can present its warded-off instinctual wishes not only in symptoms alien to the ego and labelled by society as illness. Freud's statement that "repression ... as a rule ... creates a *substitutive formation*" (Freud, 1915b, p. 154) applies not only to the minority, but also to the majority. It is true that the majority is unable to sublimate warded-off instincts, i.e. to embed them in socially valuable substitutive formations. But the majority is also able to dress up their instinctual wishes in substitute formations which are not alien to their ego and which conform to the social norms of behaviour. It is true that the work of a surgeon or a teacher would be more socially highly valued by Freud, but gambling on slot machines, attending a football match or cigarette smoking could also be understood as substitute formations (Zepf, 2012).
- Freud locates the origin of culture in the primal horde (e.g. 1930, pp. 98f.). He assumes (e.g. 1921; 1939) that the primal father of the primal horde monopolised the females of the horde, forced his sons into sexual abstinence and expelled them. After a while, the frustrated sons united and killed the primal father. Since they felt guilty afterwards, they gave up realizing their former incestuous wishes. Freud (1930, p. 100) argues: "In overpowering their father, the sons had made the discovery that a combination can be stronger than a single individual," and the "first result of civilization was that even a fairly large number of people were now able to live together in a community" (*ibid.*, p. 101)

As early as 1935 W. Reich (1935a, pp. 138-144) argued that sexual intercourse began in such primitive groupings a long time before puberty. On the assumption that sexually mature sons were banished, it was a mystery how those exiled children could have survived without care. Considering the relatively sparse global population in prehistoric times, it would have been almost impossible for them to contact women from other groups. Why the group did not die out when the sons renounced sexual intercourse with their mother and sisters after killing the primal father is beyond comprehension. Furthermore, the Freudian thesis excludes the possibility of factual incest, which was the rule rather than an exception in primeval times. Wallace (1983) argues that no

clues could be found indicating the ubiquitous existence of Freud's primal horde.

- To Freud, culture is not based on the historically specific form of the division of labour, production and distribution of goods, but first and foremost on the need to control biologically determined anti-social instinctual impulses. The result of this unhistorical conception of instincts is an individual-centred, unhistorical and psychological conception of society as well: "For sociology too, dealing as it does with the behaviour of people in society, cannot be anything but applied psychology" (Freud, 1933, p. 179). Habermas (1983, p. 354; translated) criticises the "overstretching of psychoanalytic concepts and assumptions into social theory" and notes that Freud mistakenly "presents the interactions in the mass as the intra-psychic interactions of a macro subject."

And finally:

- Because Freud's theory of culture does not proceed from the social organisation of the production of goods, but from their consumption, the satisfaction of instinctual needs and their mastery, the question remains unanswered why there are social relations at all, where a minority owns power and can govern the majority by the means of coercion at its disposal.

Summing up these objections, it cannot be overlooked that the premises on which Freud bases his theory of culture are untenable.

3. Freud's Attitude towards Historical Materialism

It seems as if Freud had noticed that an answer to the question as to why social relations come into being in which a minority has the power and means of coercion and rules the majority, remains an empty space. Admittedly, about class formation Freud argues that their formation might be due to fights between human hordes, differences in the constitutional aggressiveness or strength of their organisation and possession of superior weapons (1933, p. 177). Yet his doubts about his concept of the primal horde give the impression of speculation (e.g. 1921, p. 122; p. 135; 1985, p. 20; letter to Max Eitington dated 27 November 1934, cited in Jones, 1957, p. 194; letter to Arnold Zweig dated 11 November 1934, cited in Jones, 1957, p. 194).

Possibly his disbelief in his attempt to justify the class structure with the hypothesis of the primal horde was the reason why Freud came closer to historical materialism. In any event, he held the view that psychoanalysis "does not supply us with a fully valid [understanding of] a social phenomenon" (Freud, 1927, p. 43), while commending historical materialism in the same year, a few lines before reducing sociology to "applied psychology" (1933, p. 179), for "its sagacious indication of the decisive influence which the economic circumstances of men have upon their intellectual, ethical and artistic attitudes" (*ibid.*, p. 178), and adding: "A number of connections and implications were thus uncovered, which had previously been almost totally overlooked" (*ibid.*).

Regarding the primary aggressiveness of human beings, however, Freud argues against the view of historical materialism that, with the abolition of private property, hostility would not disappear among men. Freud (1933, p. 67) also objects that, in the view of historical materialism, "human 'ideologies' are nothing other than the product and superstructure of their contemporary economic conditions." While this may be true, it would probably not be the whole truth. Mankind will never live entirely in the present, because the super-ego lives through ideologies and with it the past, the tradition of nations, which only slowly give way to the influence of the present.

Furthermore, besides questioning class formation due to the ownership and non-ownership of the means of production, Freud also challenges the assumption "that economic motives are the only ones that determine the behaviour of human beings in society" (*ibid.*, p. 178). In this context, it is altogether incomprehensible to him "how psychological factors can be overlooked" (*ibid.*).

But, despite his objections, Freud is "quite certain that a real change in the relations of human beings to possessions would be of more help in this direction [about aggression, S. Z.] than any ethical commands" (1930, p. 143). Moreover, his argument that historical materialism ignores the formative power of the past in the present, which psychoanalysis conceptualised as super-ego, he declares in a letter dated 9 October 1937, in which he responded to a complaint of Worrall as invalid. Worrall accused Freud in a letter of having erroneously asserted that historical materialism bases all social changes exclusively on economic forces, pointing out to him that Marx and Engels do not exclude the activities of psychological moments. Freud replies:

I know that my comments on Marxism are no evidence either of a thorough knowledge or of a correct understanding of the writings of Marx and Engels. I have since learnt—rather to my satisfaction—that neither of them has denied the influence of ideas and superego factors. That invalidates the main contrast

between Marxism and psycho-analysis which I had believed to exist (cited in Jones, 1957, pp. 370f.).

And although Freud states on 19 March 1909 when discussing Adler’s presentation “On the psychology of Marxism” that he can find no “evidence of our line of thought in Marx” (Nunberg & Federn, 1967, p. 175), there are, though in later writing, however such similarities. For example, Freud’s (1927, p. 49) statement that “the effect of religious consolations may be likened to that of a narcotic” is practically identical to Marx’s (1843, p. 175) notion that “Religion ... is the opium of the people.” Freud’s (1927, p. 18) advice not to trust in the other world that it will “compensate ... for the sufferings and privations which a civilized life in common has imposed on them” but to withdraw the “expectations from the other world and concentrating all ... liberated energies into [the] life on earth,” so that “life will become tolerable for everyone and civilization no longer oppressive to anyone” (1927, p. 50) is also quite similar to Marx’s recommendation to “abolish religion as the *illusory* happiness of the people”, to “demand their *real* happiness” and “to give up illusions about the existing state of affairs is the *demand to give up a state of affairs which needs illusions*” (ibid., p. 176; italics in the original).

One can probably safely assume that historical materialism was not only for Bernfeld, E. Jacobsohn, Fenichel (1967), Fromm (1932), Parin (1975), A. Reich, W. Reich (1929) and Simmel compatible with psychoanalysis. It seems as if it represented also for Freud a sociology that was not incompatible with psychoanalytic views.

Freud's other critique addressed to historical materialism also loses its substance. His (1930, p. 113) objection to the economic justification of the emergence of classes, in which he refers to the primal horde, is invalid because there never has been such a primal horde. Likewise, his argument that it is an “untenable illusion” to believe that, with the abolition of private property, aggression would disappear, loses its validity if Freud's assumption of a death instinct laid down in biological heritage and turned outward proves untenable. At any rate, the possibility of establishing and justifying a critical attitude to historical materialism with reference to Freud thereby recedes.

In the view of historical materialism, the empty space in Freud's theory of culture can be closed. It becomes immediately apparent that the minority is constituted of those persons who own the means of production while the majority is formed by those excluded from such possession. The latter have only their labour power to sell, which produces more value than their own market price, and which the minority appropriates. The conflict that needs to be resolved is here between social production and the private appropriation of socially generated surplus value.

4. Psychoanalysis and Historical Materialism

On closer scrutiny, the similarities between psychoanalysis and historical materialism become recognisable. As psychoanalysis, historical materialism also takes the conditions of existence as a basis, is critically designed and historically reconstructs the existing organisation of society. To document the structural similarity of both processes of acquiring knowledge, I have translated Marx’s presentation of bourgeois society for the individual and placed the two analyses side by side.

Acquiring knowledge of society	Acquiring knowledge of the individual
Bourgeois society is the most developed and the most complex historic organization of production. The categories which express its relations, the comprehension of its structure, thereby also allows insights into the structure and the relations of production of all the vanished social formations out of whose ruins and elements it built itself up, whose partly still unconquered remnants are carried along with it, whose mere nuances have developed explicit significance with it, etc. (Marx, 1857/58, p. 105).	<i>Psychical relations of the adult</i> are the most developed and the most complex historic organization of <i>his mind</i> . The categories which express its relations, the comprehension of its structure, thereby also allows insights into the structure and the relations of all the vanished <i>psychical relations</i> out of whose ruins and elements it built itself up, whose partly still unconquered remnants are carried along with it, whose mere nuances have developed explicit significance with it, etc.

In both cases, the categories are to be taken from the current form of the object’s existence, while my italicized translations indicate that the view Marx (ibid.) summarises in the claim “Human anatomy contains a key to the anatomy of the ape” applies equally to the knowledge of the psychoanalytic object.

But, although psychoanalysis and the historical materialistic theory of society coincide structurally in their epistemological definition of the subject, the process of acquiring knowledge and their interests, the essential difference between them in understanding the destiny of man and his relationship to society has thus far proven to be unbridgeable. While Freud's instinct theory sees human behaviour as driven by unhistorical instinctual wishes, from the perspective of historical materialism the individual does not enter into the world as equipped with specific pre-formed instinctual wishes. Rather, by “setting in motion arms and legs, head and hands, the natural forces of his body, in order to appropriate Nature’s productions in a form adapted to his own wants ... he at the same time changes his own nature” (Marx, 1867, p. 177). In this view, the newborn child is initially

nothing but the “draft of a human being” (Elias, 1939, pp. 41f.; translated), a possible human, so to speak. The individual is not born as a subject but as a natural object, a piece of *natura naturans* which is humanized by content and becomes a subject by means of prevailing social conditions.

Attempts at analysing the social conditions which lead to neurotic disturbance have barely left any traces in the scientific development of psychoanalysis and have not solved the essential contradiction between Freud's theory of instincts and the claim historical materialism makes to explain social structures *and* human behavior. For example, some psychoanalysts, such as Horney (1939) and Sullivan (1940), stepped in the direction of historical materialism by offering a concept shortened by the psychoanalytic theory of instinct. It was criticized by Adorno (1952) and Marcuse (1955, pp. 234-269) with sound arguments. Reich, one of the most prominent psychoanalysts who dealt with this subject, attempted to establish a “physiology of neuroses” [In German: “*Physiologie der Neurosen*”] held on to Freud’s concept of instincts. He regarded neuroses as socially produced norm deviations from the genital primacy (1927a, p. 61) and postulated that all neurotic illnesses were originally based on a disturbance of genital sexuality caused by society (1925). Reich (1927b) was convinced that the essential difference between neurotic and genital character is a quantitative-economic problem in the distribution of the biological energy, first of “libido“, later of “vegetative energy“, and thereafter of “orgone energy“, a development in which the former came to be a manifestation of the latter. Whereas the “neurotic character suffers from an ever-increasing libido stasis“, the genital character “has an *orderly libido economy*“ (1933, pp. 164–165.).

The increasingly clear and explicit reduction of the psychical to a mere ephemeral appendage of an omnipotent, original inner nature—for instance, Reich (1935b) stated that “the psychological functions are merely ... the perception of objective, biophysical plasma functions“ (p. 434)—also shaped the positive outlines of Reich’s conception of man: The “cultural human“, Reich (1942) wrote, is “a living structure *composed of three layers*“; on the surface he carries the “mask ... of artificial society“ that would cover up the second layer, “Freud’s ‘unconscious’“, consisting of sadism, greediness, envy, perversions etc. that he understood as an “artefact of sex-negating culture“. In the third and deepest layer “*natural sociality* and sexuality, spontaneous enjoyment of work, capacity for love“ would exist, representing the “*biological nucleus* of the human structure“ and “man’s only real hope of ever mastering social misery“ (p. 232).

Whilst according to Freud neuroses are the result of a discrepancy between differing instinctual equipments and the social demand for a unified form of satisfaction, Reich sees neuroses arising from the social restriction of a biologically predefined unified form of instinctual satisfaction. Thus, despite Reich’s attempts and those of other psychoanalysts, the contradiction between psychoanalysis and historical materialism remains unsolved. In both Freud’s and Reich’s view, socialisation refers to the socialisation of man’s preformed instinctual nature, so that instinctual needs are the essence that only acquires a social appearance by means of socialisation. From the perspective of historical materialism, however, “the essence of man is no abstraction inherent in each single individual. In its reality it is the ensemble of social relations” (Marx, 1845, p. 4). That is, the human individual is to be understood as a manifestation of the social.

5. Laplanche’s Concept of Enigmatic Messages

If one wants to answer the question as to how society causes neuroses, this contradiction between psychoanalysis and historical materialism in the conception of the essential nature of man has to be resolved. Such a possibility opens up, if one takes Freud’s (1933, p. 95) statement that the “theory of the instincts is ... our mythology” as seriously as his view that myths are in need of enlightenment (e.g., 1924, p. 208; 1932, p. 187), and elucidates his mythological theory of the instincts, as we have done elsewhere (Zepf & Seel, 2016), in the way that Laplanche has proposed.

Laplanche (1987, p. 174; our translation) holds the view that the “drive¹ is in fact the force of representations as soon as they change into an isolated and separated status, that of the repressed.” These unconscious ideas, i.e. the child's unconscious sexual desires, do not arise from the body, but are due to the process of deciphering parental messages as the “residue” of the always imperfect translation of the message (1995, p. 182). The child’s translation of the non-verbal and verbal messages of its parents is always incomplete because such messages are enigmatic to both parents and infant, in that they are “infiltrated with unconscious and sexual signifiers” to which neither parents nor the infant have the code (Laplanche, 1984, pp. 126f.).

In Laplanche’s (2001, pp. 19f.) understanding, the infant’s sexuality is only a potentiality that manifests itself

¹ While in the Standard Edition the German term “Trieb” is translated with “instinct”, Laplanche prefers “drive” as its translation.

through the unconscious sexual messages of its parents. Freud’s assumption of pre-formed endogenous instinctual wishes is countered by Laplanche’s argument (1984, pp. 124f.) that the internal pressure emanating from the instincts is not derived from bodily sources but by “repressed thing-presentations” (ibid., p. 129; italics omitted), having been internalised by the child via projective identifications (Zepf & Seel, 2016) and then presented in the guise of substitute formations in such a way that both the conscious and the unconscious aspects of the parents are taken into account. The warded-off strivings of its parents have to be presented by the child in such a way that they cannot be understood by the parents consciously, though the secret meanings of such substitutive formations can nevertheless be unconsciously registered.

The conflicts of the father and the mother manifest themselves in the child’s substitutive formations as its own conflicts in a form that corresponds to the parents’ defensive situation. Seen in such a way, Freud’s concept of instincts proves to be a naturalistic mystification of the unconscious. That this mystification has its *fundamentum in re* and that the manifest corresponds structurally to the latent content, is shown by a comparison of Freud’s concepts of sexual instincts and the unconscious:

Freud’s concept of instincts	Freud’s concept of the unconscious
<p>The conscious object is the most variable as regards instincts.</p> <p>Instincts acquire consciousness merely via their psychic representations: “If the instinct did not attach itself to an idea or manifest itself as an affective state, we could know nothing about it” (1915c, p. 177).</p> <p>Instincts impose a demand on the ego which the ego has to meet in order to fulfil the drive wishes (1915a, p. 121).</p> <p>Instincts are subject to a “constant force” (ibid., p. 119) arising from specific chemical processes in the erogenous zones governed by the laws of nature.</p> <p>“The characteristic of exercising pressure is common to all instincts; it is in fact their very essence” (1915a, p. 122).</p>	<p>The conscious object is the most variable as regards unconscious wishes.</p> <p>Unconscious wishes are recognised in the guise of their substitutive formation. Repression “as a rule ... creates a substitutive formation” (1915b, p. 154)</p> <p>Unconscious wishes impose a force on the ego which the ego has to meet in order to keep them unconscious (ibid., p. 151).</p> <p>The “compulsion to repeat [is] the manifestation of the power of the repressed” (1920, p. 20), which asserts itself similarly to the way the laws of nature assert themselves (Dahmer, 1973, p. 379).</p> <p>“We may suppose that the repressed exercises a continuous pressure in the direction of the conscious” (1915b, p. 151).</p>

In this understanding, the humanisation of the individual is no longer anchored in unhistorical radicals. Rather, humanisation is conceived from the outset as life activity specifically structured by enigmatic parental messages.

6. Closing Remarks

Regarding the relationship between psychoanalysis and historical materialism it follows that, in Freud’s instinctual determination of human behaviour, its social determination is naturally mystified. In fact, the instinctual nature of human beings must be understood as a manifestation of their social, second nature. The contradiction in which society stands with itself, and which is, in the view of historical materialism, ultimately rooted in the contradiction between social production and private appropriation of the produced surplus value, appears in the individual not as a contradiction with his unhistorical instinctual nature, but as a contradiction in his essence, a contradiction in his social nature, a contradiction between its conscious life and unconscious objectives.

I close with a limiting remark which also justifies the need for further conceptual work. Although, by opening to historical materialism, the socialisation of man can be substantially conceptualised as a process of humanisation-and not, as Habermas (1983) objects to Freud’s understanding, only formally as such, conceivable only as fitting into existence-and individual neuroses can be understood as a “sickness of society” (Ferenczi, 1908, p. 290), as living symptoms of a social system, this understanding does not allow us to relate psychoanalytic and historical materialist insights directly. To open the possibility of a causal analysis of neuroses, it is not enough to relate sociological and psychoanalytical findings by merely selectively relating the categories under which they are subsumed. Labour, for example, is understood by historical materialism as a commodity that produces more value than it costs. It is alienated to individuals when they sell their labour power to the owner of the means of production, who then appropriates the surplus value produced by it. For psychoanalysis, however, labour is principally of interest as a mystified representation of unconscious aspects of the individual. If we now relate these different understandings of labour to each other, there is no answer to the question as to what role alienated labour has in the social causation of the neuroses. The findings of psychoanalysis and historical materialism remain imprisoned in the theoretical framework to which they belong and in which they have a cognitive function. As knowledge is not embedded in single concepts but resides in the theoretical system

within which these concepts are defined, moreover, a meta-theoretical mediation of both theoretical systems is therefore indispensable if one wants to read unabridged sociological findings in a psychoanalytical context and psychoanalytic insights in a sociological context. By replacing Freud's (1933, p. 179) "inherited human disposition" [*Triebanlage*] by "repression" and deleting the word "racial" in our opening epigraph, such a meta-theoretical mediation of historical materialism and psychoanalysis would allow a concrete causal analysis of neurotic disorders that Freud expected from "genuine social science."

Acknowledgements

Edited by Dr. Simon A. Thomas, Dublin.

References

- Adorno, Th. W. (1952). Die revidierte Psychoanalyse. In: Adorno, Th. W. *Gesammelte Schriften*, Bd. 8., Frankfurt/M: Suhrkamp, pp. 20–41.
- Andreski, S. (1972). *Social science and sorcery*. London: A. Deutsch.
- Becker, E. (1973). *The denial of death*. New York, NY: Free Press.
- Benedek, Th. (1973). The instinct theory in the light of microbiology. *The Annual of Psychoanalysis* 1: 53–72.
- Bibring, E. (1936). The development and problems of the theory of instincts. *International Journal of Psycho-Analysis* 50: 293–308, 1969.
- Braun, K. H. (1979). *Kritik des Freudo-Marxismus*. Cologne: Pahl-Rugenstein.
- Brenner, Ch. (1971). The psychoanalytic concept of Aggression. *International Journal of Psycho-Analysis*, 52, 37–144.
- Brun, R. (1953/54). Über Freuds Hypothese vom Todestrieb. *Psyche – Zeitschrift für Psychoanalyse*, 7, 81–111.
- Cohen, J. (1980). Structural consequences of psychic trauma: A new look at "beyond the pleasure principle." *International Journal of Psycho-Anal*, 61, 421–32.
- Colson, D. B. (1995). An analyst's multiple losses: Countertransference and other reactions. *Contemporary Psychoanalysis*, 31, 459–477.
- Dahmer, H. (1973). *Libido und Gesellschaft*. Frankfurt/M: Suhrkamp.
- Eckstein, R. (1949). A biographical comment on Freud's dual instinct theory. *American Imago*, 6, 211–216.
- Elias, N. (1939). Die Gesellschaft der Individuen. In: N. Elias *Die Gesellschaft der Individuen*. Frankfurt/M: Suhrkamp, 1991, pp. 15-98.
- Fenichel, O. (1945). *The psychoanalytic theory of neurosis*. New York, NY: Norton.
- (1967). Psychoanalysis as the nucleus of a future dialectical-materialistic psychology. *American Imago* 24: 290–311.
- Ferenczi, S. (1908). Psycho-analysis and education. In: S. Ferenczi & M. Balint (Eds.) *Final Contributions to the Problems and Methods of Psycho-Analysis*. New York, NY: Brunner/Mazel, 1980, pp. 280–290.
- Freud, A. (1972). Comments on Aggression. *International Journal of Psycho-Analysis*, 53, 163–171.
- Freud, S. (1909). Analysis of a phobia in a five-year-old boy. *Standard Edition*, 10. London: Hogarth Press, pp. 5–147.
- (1910). The future prospects of psycho-analytic therapy. *Standard Edition*, 11. London: Hogarth Press, pp. 139–151.
- (1915a). Instincts and their vicissitudes. *Standard Edition* 14. London: Hogarth Press, pp. 109–140.
- (1915b). Repression. *Standard Edition*, 14. London: Hogarth Press, pp. 141–158.
- (1915c). The Unconscious. *Standard Edition*, 14. London: Hogarth Press, pp. 159–204.
- (1916-17). Introductory lectures on psycho-analysis. *Standard Edition*, 15/16. London: Hogarth Press.
- (1920). Beyond the pleasure principle. *Standard Edition*, 18. London: Hogarth Press, pp. 1–64.
- (1921). Group psychology and the analysis of the ego. *Standard Edition*, 18. London: Hogarth Press, pp. 65–144.
- (1923a). Two encyclopaedia articles. *Standard Edition*, 18. London: Hogarth Press, pp. 233–260.

- (1923b). The ego and the id. Standard Edition, 19. London: Hogarth Press, pp. 1–66.
- (1924). A short account of psycho-analysis. *Standard Edition*, 19. London: Hogarth Press, pp. 189–210.
- (1927). The future of an illusion. *Standard Edition*, 21. London: Hogarth Press, pp. 1–56.
- (1930). Civilization and its discontents. *Standard Edition*, 21. London: Hogarth Press, pp. 57–146
- (1932). The acquisition and control of fire. *Standard Edition*, 22. London: Hogarth Press, pp. 183–194.
- (1933). New introductory lectures on psycho-analysis. *Standard Edition*, 22. London: Hogarth Press, pp. 1–182.
- (1939). Moses and monotheism. Standard Edition, 23. London: Hogarth Press, pp. 1–137.
- (1940). An outline of psycho-analysis. *Standard Edition*, 23. London: Hogarth Press, pp. 139–207.
- (1960). Letters of Sigmund Freud 1873-1939. New York, NY: Classic Books.
- (1985). Overview of the transference neurosis. In: I. Grubrich-Simitis (Ed.) *A phylogenetic fantasy*. Cambridge: Harvard University Press, 1987, pp. 5–20.
- Fromm, E. (1932). The method and function of an analytic social psychology. In: E. Fromm *The Crisis of Psychoanalysis*. New York, NY: Holt, 1970, pp. 110-134.
- Gabbard, G. O. (2000). Hatred and its rewards. *Psychoanalytic Inquiry* 20: 409–420.
- Gifford, S. (2007). Putnam camp: Sigmund Freud, James Jackson Putnam, and the purpose of American psychology. *Journal of the American Psychoanalytic Association* 55: 1417–1423.
- Goodnick, B. (1993). A well-deserved Sabbath rest: Three Freud Patriarchs. *Journal of the American Academy of Psychoanalysis* 21: 107–115.
- Grubrich-Simitis, I. (1993). *Zurück Zu Freuds Texten. Stumme Dokumente Sprechen Machen*. Frankfurt/M: Fischer.
- Habermas, J. (1983). Bemerkungen zu Alexander Mitscherlichs analytischer Sozialpsychologie. *Psyche – Zeitschrift für Psychoanalyse* 37: 352–363.
- Holt, R. R. (1965). A review of some of Freud’s biological assumptions and their influence on his theories. In: N. S. Greenfield & W. S. Lewis (Eds.) *Psychoanalysis and current biological thought*. Madison, CT: University of Wisconsin Press, pp. 93–124.
- Horney, K. (1939). *New ways in psychoanalysis*. New York, NY: W.W. Norton & Co.
- Jones, E. (1957). *Sigmund Freud Life and work, Vol. 3*. London: Hogarth Press.
- Kapp, R. (1931). Comments on Bernfeld’s and Feitelberg’s “The principles of entropy and death instinct”. *International Journal of Psycho-Analysis* 12: 82–86.
- Laforgue, R. (1932). *Libido, Angst und Zivilisation*. Wien: Internationaler Psychoanalytischer Verlag
- Laplanche, J. (1984). The drive and its source-object: its fate in the transference (Translation: L. Hill). In: Laplanche, J. *Essays on otherness*. London: Routledge, 1999, pp. 158–197.
- (1987). *Neue Grundlagen für die Psychoanalyse*. Gießen: Psychosozial-Verlag, 2011
- (1995). Seduction, persecution, revelation (Translation: Ph. Slotkin), in J. Laplanche *Essays on otherness*. London: Routledge, 1999, pp. 166–196.
- (2001). Ausgehend von der anthropologischen Grundsituation ... (Translation: P. Passett). In: L. Bayer & I. Quindeau (Eds.), *Die unbewusste Botschaft der Verführung*. Gießen: Psychosozial-Verlag, pp. 17–30.
- Lichtenstein, H. (1935). About the phenomenology of the compulsion to repeat and of the death instinct. *Imago* 21: 466–480.
- Marcuse, H. (1955). *Eros and civilisation*. Boston, MA: Beacon Press
- Marx, K. (1843). Contribution to the critique of Hegel’s philosophy of law. *Karl Marx-Frederick Engels, Collected Works*, 3. New York, NY: International Publishers, 1975, pp. 175–187.
- (1845). Theses on Feuerbach. Karl Marx-Frederick Engels, *Collected Works*, 5. New York, NY: International Publishers, 1976, pp. 3–5.
- (1857/58). *Grundrisse. Foundation of the critique of political economy (rough draft)* (Translation: M. Nicolaus). Harmondsworth: Penguin Books, 1973.

- Capital, Vol. 1. New York, NY: International Publishers, 1983.
- Nunberg, H. & Federn, E. (1967). *Minutes of the Vienna Psychoanalytic Society, Vol. II: 1908-1910*. New York, NY: International Universities Press.
- Parin, P. (1975). Gesellschaftskritik im Deutungsprozess. *Psyche – Zeitschrift für Psychoanalyse* 29: 97–117.
- Penrose, L.S. (1931). Freud's theory of instinct and other psycho-biological theories. *International Journal of Psycho-Analysis* 12: 87–97.
- Reich, W. (1925). Further remarks on the therapeutic significance of genital libido. In: Reich, W. *Early writings, Vol. 1*. New York, NY: Farrar, Straus & Giroux, 1975, pp. 199–221.
- (1927a). *The function of orgasm*. Amsterdam: Thomas de Munter, 1965.
- (1927b). Genitality in the theory and therapy of neuroses. *Early Writings, Vol. 2*. New York: Farrar, Straus & Giroux, 1980.
- (1929). *Dialectical Materialism*. London: Socialist Reproduction, 1972.
- (1933). *Character-analysis*. New York, NY: Farrar, Straus and Giroux, 1958.
- (1935a). *The invasion of compulsory sex-morality*. Harmondsworth: Penguin Books, 1975.
- (1935b). From psychoanalysis to orgone biophysics. In: Reich, W. *Character-Analysis*. New York, NY: Farrar, Straus & Giroux, 1968, 291–508.
- (1942). *The function of orgasm*. London: Cox & Wyman, 1968.
- Spiegel-online (2011). *Zahl der psychischen Erkrankungen steigt auf Rekordhoch*. 15 February 2011.
- Schur, M. (1972). *Freud: Living and dying*. New York, NY: International Universities Press.
- Sullivan, H. S. (1940). *Conceptions of modern psychiatry*. New York, NY: W. W. Norton & Co. 1953.
- Wallace, E. R. (1976). Thanatos—a re-evaluation. *Psychiatry* 39: 386–93.
- (1983). Freud and anthropology. A history and reappraisal. *Psychol. Iss., Monogr.* 55. New York, NY: International Universities Press.
- Werman, D. S. (1985). Freud's Civilization and its Discontents—A reappraisal. *Psychoanal. Rev.* 72: 239–254.
- Whitaker, R. (2010). *Anatomy of an epidemic: magic bullets, psychiatric drugs, and the astonishing rise of mental illness in America*. New York, NY: Crown Publ.
- Wittels, F. (1924). *Sigmund Freud: His personality, his teaching, and his school* (Translation: E. Paul and C. Paul). London: Allen & Unwin.
- Zepf, S. (2012). Repression and substitutive formation—The relationship between Freud's concepts reconsidered. *Psychoanal Review* 99: 397–420.
- & Seel, D. (2016). Freud's "Trieb"—A clinical and metapsychological analysis. *Canadian Journal of Psychoanalysis* 24: 91–119.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Power, Legitimacy, and Urgency of Community-Based Tourism Stakeholders in Northeastern Thailand

Mattara Sripun¹, Sekson Yongvanit¹ & Richard Pratt²

¹ Faculty of Humanities and Social Sciences, Khon Kaen University, Khon Kaen, Thailand

² College of Social Sciences, University of Hawaii at Manoa, Honolulu, USA

Correspondence: Mattara Sripun, Development Science Program, Faculty of Humanities and Social Sciences, Khon Kaen University, Khon Kaen, 40002, Thailand. E-mail: msripun@googlemail.com

Received: January 23, 2017

Accepted: February 6, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p104

URL: <https://doi.org/10.5539/ass.v13n4p104>

Abstract

This paper examines the dynamics of Community-Based Tourism (CBT) stakeholder salience namely; power, legitimacy and urgency. Data is drawn from a doctoral research fieldwork, undertaken from 2013-2016 in two long running CBT villages in Northeastern Thailand which are Ban Prasat; an archaeological site in Nakhon Ratchasima province, and the ethnic Phu Tai cultural village of Ban Khok Kong in Kalasin province. Instruments include secondary data, participatory and non-participatory observations, and in-depth interviews using semi-structured questions with 53 key informants selected from 5 pre-defined stakeholder groups. Content analysis is employed using a modified stakeholder salience framework. The paper is structured into four main parts; an introduction to the theoretical foundations of the research, the examination of “legitimate” stakeholder groups and their dynamic relations, the discussion of stakeholder salience’s fundamental concepts of “who and what really matters”, and the limitations of applying a stakeholder approach in the CBT context. Findings unfold subtle but complex layers of process dynamics and stakeholder relationship. Women and the elderly are the backbone of a CBT process. Stakeholders play various roles based on group member skills. Roles and responsibilities are contingent, inclusive, and non-hierarchical. Functional differentiation serves as a management parameter and determines stakeholder urgency. Though CBT is managed through a participatory decision making process, the leaders are the most powerful stakeholder groups controlling tourism resources and regulations. CBT stakes are collective benefits. Normative legitimacy is found to be the most critical aspect. Interest overlap and the dynamic range of the stakeholder interrelations found in both CBT communities are too contingent and transitory for a unified thought on CBT management. Stakeholder interrelations transit as the setting evolves and the stakeholders themselves make decisions or change their opinions. This subjective element highlights moral essentiality and leadership dependence. Legitimacy is inevitably another form of power.

Keywords: Community-Based Tourism (CBT) stakeholders, Stakeholder Salience, Stakeholder Relations, Northeastern Thailand

1. Introduction

Current practices of tourist operation highlight a commitment to sustainability challenge, particularly on a local scale. Most tourism resources are based here and tourism is, to a great extent, recognized for its socio-economic and environmental benefits as well as its possible adverse consequences to the host communities (Ruiz-Ballesteros, 2011; Lacher & Nepal, 2010). This is particularly apparent and significant in the Community-Based Tourism (CBT) approach that is increasingly seen as a potential contributor to the local economy and is a means by which sustainable tourism development can be achieved (Telfer & Sharpley, 2008). Through the notion of community ownership, self regulation and community-based management, CBT intends to help empower local people to play a pro-active role in the tourism process and receive a fair and equitable share of the benefits from tourism (The Community Based Tourism Institute (CBT-I)).

The debate over tourism’s impacts on the community still exists. Tourism management at the community level is widely acknowledged for its political implications. Communities are not homogenous and the interests of community members do not always coincide (Hall, 2007). This means managing the sometimes competing demands of tourism activities, social and cultural values, and resources used for tourism. Politics is ever present

in the clash of different interests. This may include economic purpose, conservation, and protection of tradition, culture and heritage, environment as well as scale of development, pace and so on. Not all community members embrace tourism development or benefit equally from their participation in tourism. Tourism development tends to face pressures from outside investors. Communities with weak governance systems and lax internal control mechanisms that determine the degree to which a community can control its tourism process are likely to open up to large-scale development and go beyond the community's carrying capacity. This will inevitably bring major changes to the place that may cause great concern and lead to deterioration of the environment and eventually, displacement of the local residents (Murphy, 2005; Lortanavanit, 2009).

While the key concept of community involvement in the process is clearly important and essential for sustainable tourism development, there is a certain level that is only rhetoric in this approach. It is less apparent whether the development is truly driven by community interests, rather than such other factors as bias within the system, leadership, or corruption (Jeffries, 2001; Hall, 2007; Lortanavanit, 2009). There is also a certain degree of ambiguity as to whose interests within the community should be at the forefront of tourism plans. Uneven distribution of benefits is well documented in studies into tourism and local communities (Cole & Morgan, 2010). Disproportionate benefits leads to tensions and conflicts within the community. Cases in which mainly elite groups benefit from tourism further underline the existing inequalities and differences in the community caused by mass tourism. However, in some successful cases of community-based tourism management, benefits from tourism, both tangible and intangible, can help solve conflicts, lessening tension and opposition to tourism development (Coria & Calfucura, 2012). Communities differ in terms of the nature and scale of their tourism development. The importance of local management practices has not always been recognized in development planning (Bennett, Lemelin, Koster & Budke, 2012). This has led to inappropriate development initiatives that provide only limited benefits to limited numbers of people and has put additional pressure on the resources.

2. Theoretical Foundations of the Research

This study applies the stakeholder salience framework proposed by Mitchell, Agle, & Wood (1997) to examine the CBT management process through its stakeholder interactions. Mitchell, et al. derive a typology of stakeholders based on the attributes of power (the extent a party possesses means to impose its will in a relationship), legitimacy (socially accepted and expected structures or behaviors), and urgency (time sensitivity or criticality of the stakeholder's claims). The stakeholders of community-based tourism are made up of different groups, and quite often, they have different purposes. Whilst it is not difficult to produce a list of stakeholders for an organization, identifying legitimate tourism stakeholders and determining their influences may not be an easy task as tourism is multi-faceted and one of the most complex and dynamic sectors.

Although the mainstream of literature in this area points to the role played by stakeholders in community-based tourism, a few previous studies have investigated the actual relationship between stakeholder involvement and the effectiveness of management practice; i.e. how and to what extent the practice has been fostered by their efforts or influenced by their relative power. To date, it is not always clear who are the "legitimate stakeholders and major beneficiaries" of tourism development within the community and which group of stakeholders the development objectives should satisfy the needs of. Moreover, it is also not easy to reconcile the requirements of these various stakeholders and their often contradictory interests. This consequently makes it extremely difficult to determine a well-balanced approach for the management of community-based tourism and its various stakeholders.

Drawing on an integrated approach through the descriptive and analytical lens of a stakeholder management framework, the study seeks to explore and make explicit, current practices in CBT management in Northeastern Thailand. Using the modified stakeholder salience framework, an examination is made of the identification of legitimate stakeholders, their salience, and the dynamics of stakeholder interrelations and interaction on CBT management processes.

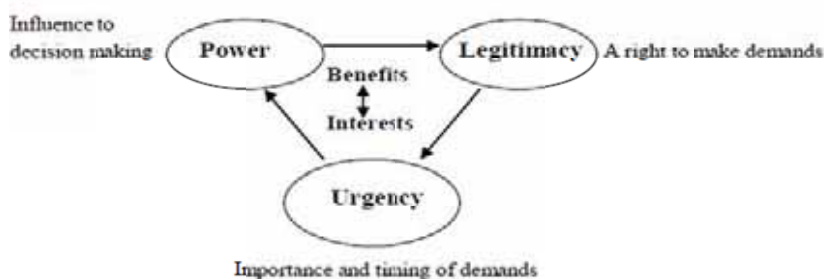
2.1 Defining and Interpreting Stakeholders Analytical Attributes in Community-Based Tourism

A stakeholder approach to CBT is relative to the continuous process that results in the outcomes contributed by the various CBT stakeholders. Stakeholder components are highly interrelated because of the dynamic and multifunctional nature of the tourism process (see Figure 1). "Stake"-holders have a right to make demands which they perceive as important and urgent. Their demands are driven by their interests which are influenced by perceived benefits based on perceived values of CBT, both tangible; i.e. economic and physical means and intangible; i.e. quality, appropriateness, fitness for purpose or well-being. These stakeholder elements have different influences on the management process and each element plays a different role in different stages.

Legitimacy, in this context, is the belief that a person who has a "stake" in tourism in that particular territory has

the right to make demands. Tourism stakeholder legitimacy is therefore, an acknowledgement of an interest to pursue community resources for tourism to gain its perceived benefits or avoid its potential costs and a general appreciation of this process to achieve desirable outcomes makes their actions highly legitimate. Legitimacy of stakeholders is contextual justice and fairness (Phillips, 2003). Stakeholder conflict over aims and outcomes of the tourism management process is often downplayed due to its complexity and highly political undertone, particularly the tourism that takes place where the governance structure is weak or informal (Hall, 2007). Collective actions in CBT management are only beneficial to those who are represented or included in the process. The successful outcomes of actions hence depend on the relative power of stakeholders and their success in co-managing resources to achieve a goal shared by all parties.

Concept Mapping of Stakeholder Attributes in CBT



997

In Thailand, forms of collective action and social network have remained loosely structured, based on a horizontal relationship and consisting of largely independent affiliates (Lortanavanit, 2009). This means that social interactions among different groups of stakeholders can be undermined if stakeholders fall short of relative power in the control and management process. This modified stakeholder analytical framework encourages a multi-approach through systems thinking whereby all managerial components, including stakeholders and their involvement in the process as well as their impact on the system within the community, are incorporated. Different stakeholders may have different perspectives and needs or demands which should reflect the dynamics of the local context and practical elements.

3. Research Methodology

The study adopts a qualitative approach including such methods as in-depth interviews, participatory and non-participatory observations, and the use of related, existing studies. These qualitative methods are useful in different ways. Observations are effective in exploring the stakeholder group dynamics and allow the free flow of data collection on stakeholder normal behaviours in specified contexts, whilst in-depth interviews are useful in investigating stakeholder opinions and perceptions related to their CBT experiences.

3.1 Scope of Population

The population includes any CBT stakeholders in the selected study sites. Based on Freeman (1984) definition, "Stakeholder" is a group or individual who can affect or be affected by the achievement of the village's CBT management's objectives. Basically, any member of the village can be described as a "stakeholder". Stakeholders in this study fall into 5 groups: government officials, leaders, tourism entrepreneurs, community members, and tourists. The targeted population for the qualitative approach includes 53 key informants (10 Key informants from the group of leaders, elderly, local wisdom, head of local organizations and 43 representatives of stakeholder groups) from within the two selected communities (government officials, community leaders, tourism entrepreneurs, community members, and tourists).

3.2 Selected Areas of Study

- Ban Prasat, NonSung District, Nakhon Ratchasima Province

Ban Prasat is an archaeological site village chosen on the basis of the length of its tourism development which spans over 30 years, its social recognition as a CBT award-winning village, which has been widely acknowledged by the local network, and the village's tourism practices that highlight major premises of a sound CBT approach.

- Ban Phu Thai Khok Kong, KuchiNarai District, Kalasin Province

Ban Phu Thai Khok Kong is another well-established and award-winning cultural tourism village of the Phu Thai ethnic group in the Northeast region that has been practicing CBT for nearly 20 years. Another important criterion for selecting this village as a study area is that it shares natural resources for tourism with the management of Nam Tok Tad Sung Forest Park. This element allows comparisons to be made between the two selected areas of study in terms of the different process components in managing CBT by different stakeholder groups.

3.3 Methods and Data Collection

The initial task involves conducting a secondary research to collect all related information, followed by making a number of field visits to get into the exploration of the surrounding context and gain a historical overview of change in the village, particularly in relation to tourism and its development within the community and arrange formal or informal one-on-one meetings with representatives of the individual stakeholder groups. This is necessary both to gain community history from key informants who possess knowledge about tourism development within their community and also because some of the information i.e. opinions about other stakeholders which is likely to be confidential. Following the introductory step and the identification of stakeholder groups, key informants from each of the identified groups are selected for in-depth interviews. Each interview takes about an hour. The interviews are held in order to explore stakeholders' interests, needs, visions and the relative power of different stakeholder groups and their collaborative efforts in managing CBT.

Different strategies are used to identify key informants. The main strategy, with the assistance of the village headman and by asking community members through informal talks, is to cross-check the accuracy of the list of people who are involved with CBT management (preliminarily identified from existing studies according to research scope and approach). However, the selection of key informants for in-depth interviews is according to relevance and availability. A series of preliminary visits to both study sites prior to the actual fieldwork are made to get a visual image of the village and "feel" a sense of the place as well as the dynamics of the people within the community. Participant observation is incorporated at the very beginning in order to not only understand the local context and key issues relating to research questions, but also to blend in with the lives of the people in the village. This method allows the formulation of firsthand accounts and fresh insights. The researcher is based in the study villages throughout the fieldwork.

The process of triangulation comprises of data multi-checking from different sources and different data collection methods. Thematic and content analysis is employed to analyze the data. It is an inductive process to find commonalities and differences in the data that lead to a description where an explanation, both inside and outside the study scope, can be checked and modified and a data organization which reads, summaries and codes to organize data into categories, sub-categories and theme generations, based on the research framework.

4. Research Findings and Discussions

4.1 Identification of "Legitimate" Stakeholder Groups and Their Relations

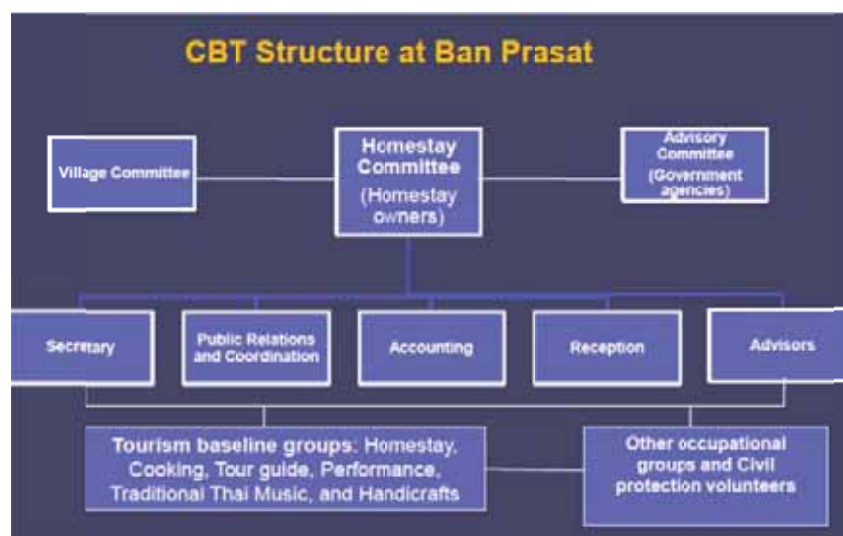


Figure 2. CBT structure at Ban Prasat

The structure of local organization at both villages mirrors that of the Thai village model; the village is governed by the village headman, elected by villagers, and the village committee, made up of prominent figures

representing every segment in the village. Tourism is one of the village production groups entirely run by the villagers. Conceptually, all the group members are primary stakeholders as they “can directly affect or are affected by the achievement of the group objectives” and therefore they all have a legitimate interest in tourism and its “assumed” benefits. To include all of them as an inclusive community stakeholder, though, is difficult to accomplish. In practice, some stakeholders are more involved than others. A starting point, therefore, is to identify which stakeholder groups are and are not actively participating in the tourism process. The two villages organize their community tourism using different structures.

Tourism at Ban Prasat (see Figure 2) is operated and managed by the village homestay group committee of 19 members elected from the 23 members of the group (who are the homestay owners). The key role of the committee is to administer and manage all tourism related-activities. The committee is headed by the village headman and his deputy. The board is divided into 5 administrative units: 1) secretary, 2) public relations and coordination, 3) accounting, 4) reception, and 5) advisors. Although the committee advisors have no formal decision-making power, they are in practice a key driver in providing and shaping the direction of the work and administration of the group.

The homestay committee further incorporates other production (occupational) groups in the tourism plan and its implementation; the homestay group is an administrative centre while the occupational groups are operational units. The incorporated groups are mainly smaller tourism groups or occupational groups which can function independently or in association with the homestay group. These groups are: 1) cooking (foods and deserts), 2) local handicraft, 3) silk weaving, 4) traditional Thai music, 5) youth tour guide, 6) Palm-chair making, and 6) hat weaving. The village also has an advisory tourism committee (government agencies) to lend support and assistance: 1) District chief, 2) Director of the provincial Tourism Authority of Thailand (TAT), 3) Director of the provincial Fine Arts department, 4) Head of Tambon Administrative Organization (TAO), and 5) Director of the Ban Prasat School.

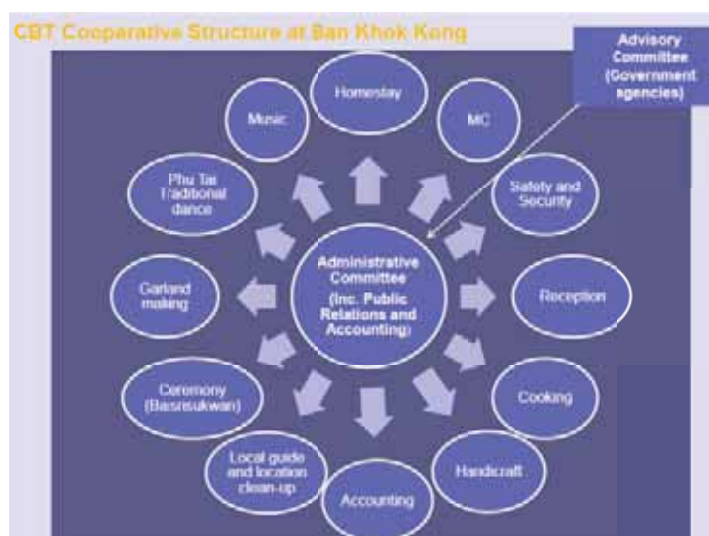


Figure 3. CBT cooperative structures at Ban Khok Kong

Ban Khok Kong tourism (see Figure 3) is organized in cooperative structures. The village tourism cooperative has operated under 13 committees consisting of: 1) administration (including public relations and accounting), 2) homestay, 3) master of ceremony, 4) safety and security, 5) reception, 6) cooking, 7) handicrafts, 8) accounting, 9) guide and location clean-up, 10) ceremony (*baisrisukwan*), 11) garland making, 12) Phu Tai traditional dance music, and 13) advisory committee. The composition of the Ban Khok Kong advisory committee reflects a strong local government tie. It includes people from various public sectors: District chief, Head of the local police, District development official, District culture official, Tambon development official, District chief, Mayor, Head of TAO, Director of Ban Khok Kong School, Director of Ban Nakri School, the Director, and Deputy of provincial tourism, sports, and recreation centre.

The tourism operation is controlled by the administrative group which is made up of the village leaders who are also members of the village committee. The tourism group members are simply divided into sub-groups based on the type of activities and most are headed by a member of the administrative committee (a member of the leader group). The cooperative members are free to choose any group they want to participate in. Apparently, some sub-groups are skill-based i.e. handicrafts, music and Phu Tai dance. Some are obviously gender-orientated,

where all or almost all members of the group are either male or female i.e. the tasks of reception, cooking, garland making, Phu Tai traditional dance, are performed by women; while the music, safety and security, guide and location clean-up groups are made up of male members. The homestay and accounting groups are practically a branch administrative unit as all the members of these two groups are the same as those listed in the administrative committee. In reality, through a number of field observations, the task segmentation in Ban Khok Kong is very fluid. It is a simple division of labour, loosely applied to aid group operations and management. Tourism is a simple organization based upon primitive group units where group leaders take the lead in major community functions.

Community multilayered participation at Ban Prasat appears to be more orderly. Ban Prasat reflects a similarity in terms of sub-group organisation based upon task specialisation. However, such groups are not administratively and economically tied to the tourism group. The operational loop of tourism, therefore, is a lot smaller, with tighter control over the whole process. The homestay group is practically a single administrative unit made up of the community leaders. Only members of the homestay group are included. Rules and regulations of the homestay practice define the legitimacy of the interest and conduct. This approach draws the boundary of CBT practice and determines the scope of each group of the community primary stakeholders and their position in the tourism process.

Tourism sub-groups, which are mostly skill-based, in both villages are contingent, particularly handicrafts. It largely depends on member's skills and availability, market demand and trend, the volume of tourists in the village, and other development programs (i.e. One Tambon One Product (OTOP) promotional theme). The permanent groups are those that form the baseline services for tourist consumption including the homestay, cooking, tour guide, performance, music, and weaving crafts groups. Other small local enterprises and individual producers, in both villages, operate in a wider context. They not only serve tourism but the whole community. Shop owners (both private and communal), hair dressers, masseurs, motorbike service providers, and food vendors are present among this group.

4.2 Defining Legitimate CBT Stakeholders: Primary and Secondary Stakeholders

Setting against the nature of tourism stakeholders discussed in section 4.1, the legitimate CBT stakeholders can be characterized into two distinctive groups:

- 1) The key stakeholder who is an "actor/collaborator", falling into 4 sub-groups:
 - (1) Tourism leaders and group members of both the main and sub-groups.
 - (2) Tourism entrepreneurs-shop owners (both private and communal), hair dressers, masseurs, motorbike service providers, food vendors (food and drink), laundry service.
 - (3) Village members - audiences and extras
 - (4) Tourists - actors on the demand side
- 2) The supporting stakeholder who is the "facilitator/mentor" which falls into 3 sub-groups:
 - (1) Village leaders - village head (by position), former village head, teacher, village committee, representatives of village organizations (health volunteers, civic protection volunteers, village police volunteers, elderly protection volunteers, women's development group, village fund committee), village representatives in TAO.
 - (2) Government officials - advisory board and local non-committee government agencies.
 - (3) External tourism agencies - tour operators both local and national, Tourism Department officials, educational and training institutions, and the media.

4.3 Stakeholder Collaborative Patterns

CBT stakeholder collaborative patterns are a multi-layered process. Stakeholders take various roles, as parts of a formed group, based on member skills. Stakeholders perform different functions at different times during the tourism process. Roles and responsibilities are sometimes allocated on a temporary and contingent basis, according to inclusive and non-hierarchical relationships. All stakeholders are interdependent and inclusive with the various issues at stake based on their functional differentiation. Leaders direct and enable the group to achieve its objectives. Strong leadership is well documented in both case studies.

Functional elements of the group involve lots of meetings. From observing a number of community meetings during the field study, members are very engaged and they do not shy away from voicing their opinions or raising issues. They are very skilled at getting their views across and communicating with each other. Creativity

and problem solving skills though are obviously provided by the leader group. Seniority is seen to exert a strong influence on others, in both communities. It can be described as a collaborative, dynamic process that is fuelled by a democratic act.

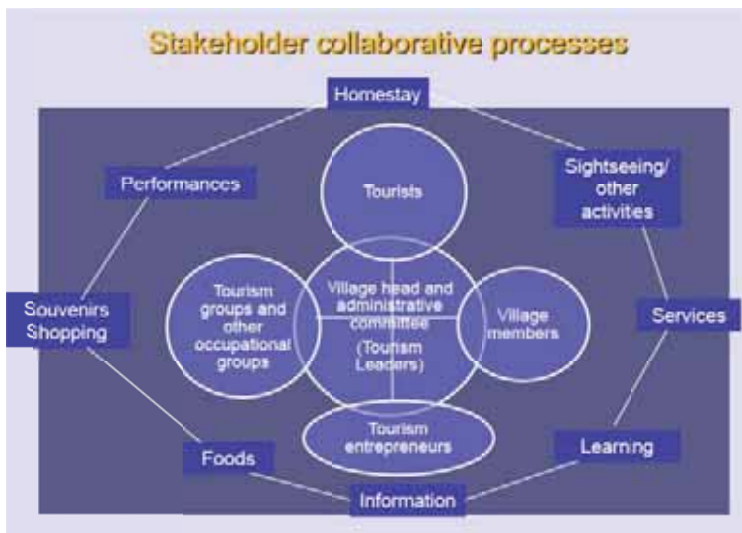


Figure 4. Stakeholder collaborative processes

Group relations are ancestrally tied. Members are neighbours, friends, relatives, or family. They share the same livelihood landscape, working together on their farms. Labour exchange is still practiced in both villages. Group members have various opportunities to discuss planned activities, talking things through with possible issues to be discussed. When there are “autocratic hiccups”, they can be easily smoothed over through their informal conversations, for example, while working together on the farm or at the numerous social gatherings within their community i.e. at the temple, weddings, house warming ceremony or “*Ngan Pattana*” or community development events (mostly physical). These things are of minor importance i.e. designing menus for tourists, how much money should be spent on cooking ingredients, who should be doing the shopping, which performances should be put on, or whose crafts are better for the market. They might get annoyed but in the end, they work together anyway. Seniority plays a significant part in smoothing over hiccups. From a direct observation, everyone in the village is linked to others (one or another); they share a daily life boundary (next door to one another at home or at the farm). Their level of tolerance is emblematic of a more embedded tribal value; that they share ancestral ties.

4.4 Characteristics of Stakeholder Salience and Its Fundamental Concepts of “Who and What Really Matters”

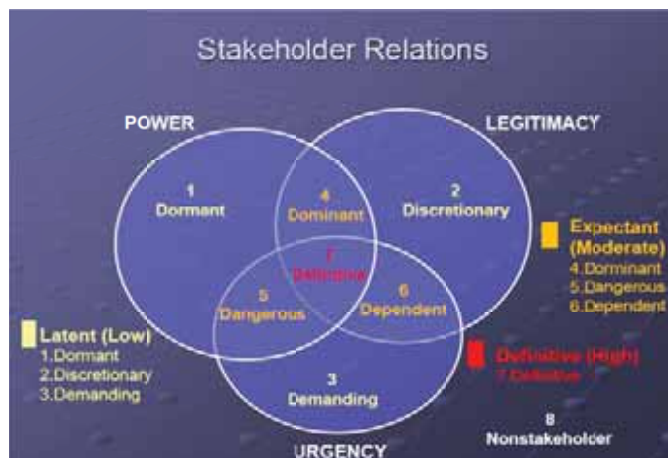


Figure 5. Stakeholder analytical framework adapted from Mitchell et.al., 1997 p.874

4.4.1 Power: Types of Relative Power, How It has Been Exercised, and Its Influence on the CBT Process

Mitchell, et al. (1997) defines power as “the extent a party has means to impose its will in a relationship”. This research modified and operationalised the concept of relative power as a possession of means to exercise such

power and influence the tourism processes and stakeholder relationship. A set of CBT relative powers over the CBT management process can be categorised as follows:

1) *Formal power*: Means of this power include the right to acquire the action of others by being in an officially appointed position. It is an official power. CBT stakeholders who possess this type of power include the village head, village committee, village volunteers in appointed groups, government officials related to tourism activities (TAO, development officials, and Provincial Tourism authority). It is common to refer to “formal power” as authority. It is the official right to act, based on position. Authority is one source of power, but people in authority are not always powerful. Authorities in both CBT villages include village head and village committee. CBT power is formed by the local governance structure. The village head serves as a government body who acts as a medium in regulating people and resources for tourism. The village self-regulating system is still under state influence. Leaders, in this perspective, are a form of dominance. In both CBT communities, village head is the most powerful person in the CBT processes. It is a right that cannot be opposed as the village head is elected by village members. Any opposition they may have can be settled by the acknowledgement of the position. There is no opposition once the election is over. However, such opposition (naturally from those who did not elect/not support the person/the opponents) is to be played out /influence their will to participate/ and level of their efforts to put forward CBT activities being led by the leader who is their opponent.

The CBT dynamic in both villages is clearly a political process with the subtle complexity of social relations and interactions, influenced by culture. This is particularly the case of Ban Khok Kong as the length of their CBT has spanned over the administration of three village heads. The bigger the size of their support, the higher the influence they have on group decision making and also the degree of participation as well as the efficiency of the tasks being done. For instance, the community members may have been divided 70:30. Seventy percent of them support the current administration, while the rest, 30 percent, support the former leader. This 30 percent of the community members accept the election result but are not necessarily enthusiastic about village social activities. Nevertheless, villagers are largely related to each other by blood (partly as a result of intra-ethnic marriage in older generations); in some households, the husband is a relative of the former leader while the wife is a relative of the current one or vice versa. Therefore, they are not strongly opposed to one another. It is more of a compromise situation. CBT, at the ethnic village of Ban Khok Kong, is a very clear example of a family (social) enterprise; they are just one big family and they compromise because it is a family affair. CBT at Ban Prasat has only been led by two village chiefs and the current village headman is the successor of the former leader (his assistant and also nephew) who is a strong supporter and carries on leading in the background.

2) *Normative power*: This is related to norms of behaviour or a general acceptance of an individual in a community. Spiritual, respected figures and informal leaders of the community belong to this group. This group is the backbone of CBT force in both villages. The elders, local wisdoms, former village heads, CBT creators are held in the highest regard, their opinions mean a great deal and are advocated with high priority. This group has a strong impact on group decision making. Their interests/visions/agendas influence the whole process. They are the main support and a major sustaining factor of the CBT practice in both communities. Their presence is strongly influential. Seniority is a source of power. Thai society is still hierarchical; seniors (both men and women) continue to be treated with respect. The CBT seniors are mostly found in the group of informal leaders i.e. well respected elders, local wisdom, and spiritual figures.

3) *Utilitarian power*: This is a power based on the possession of resources including materials, skills, and knowledge. A teacher is among this group at both villages. CBT relies heavily on their resourceful power. Others are those with materials i.e. nice houses to be homestays and funding for improvement or investment in new tourism ventures. In Ban Prasat this includes the Fine Arts department that operates the museum. And Ban Khok Kong is a Forest park that has full control over the park utilisation as a tourist attraction.

4.4.2 *Legitimacy*: Types of Stakeholder Rights (Contextually Judged) and Putting Them in Practice

The context of legitimacy in this research is a generalised perception that the conduct of a participant is desirable or appropriate in accordance with a socially constructed context that may be individual, communal, or social. Anyone who has a “stake” in tourism, in that particular territory, has the right to make demands and can be described as a stakeholder. However, to be productively legitimized or socially accepted in their right or claim for a stake, the stakeholder has to act upon their legitimacy. Basically, all community stakeholders have a right to participate in tourism activities. Forms of legitimacy found in this study can be categorised in three access channels; voice, rights and participation. Villagers can voice their opinions on tourism matters. But their opinion will not have as strong an impact as of those who are tourism group members or leaders. The more actively involved the stakeholders are, the higher the legitimacy of the claims of their demands/shared benefits. In

practice, certain stakeholders participate while others do not. The levels of stakeholder participation also vary. Both communities have their own regulating system to manage variation and ensure contextual justice and fairness in the CBT process. The village head has full legitimacy to CBT claims by position and the inclusiveness of his/her participation in the process. Tourism groups have the right to benefits based on their functions. Profit distribution is clearly defined in the rules and regulations, and so are roles and responsibilities.

Power alone is not enough to determine stakeholders' influence. It requires legitimacy to exercise the power. It is clear why it is important for a person or a group to have legitimacy; it means they can participate and affect CBT processes. However, the main argument is about whom or what confers legitimacy on a person or group; who influences or has the final say in making decisions which are assumed to be egalitarian. The particular 'who' or 'what' that confers legitimacy is inevitably another source of power. This underlines the inherent limitations of the stakeholder salience concepts. In these two villages, decisions are always made by voting and consensus but embedded culture and values, where mentality is framed by cultural factors, for example, respecting the seniors, caring about what others think, or not being able to be upfront, somehow influence the villager's democratic self. It is allegedly the Thai style of democracy. In both case studies, forms of their collective action and local governance are still loosely structured and largely based on the trust and strength of their social relations. Interactions among different groups of stakeholders and process outcomes can be undermined if stakeholders lack relative power over the control and management process. This is perhaps one impediment to a normative legitimacy; it places too much faith on morality and quality of leadership in which both attributes are highly subjective and difficult to control and manage.

4.4.3 Urgency: The Type of Stakeholder Demand or Related Issues that Stakeholders Have

There are two dimensions of stakeholder demands; the importance of the claim or the relationship to the stakeholders and the urgency of demands that calls for immediate action. Demands can be freely expressed by all stakeholders but the importance and urgency of demands are determined by the tourism committee. However, the decision over any actions or implementations resulting from such demands is made through a managed participation process. Unequal power is well observed during the process. In both communities, power is strongly associated to a group of CBT creators/founders with a decisive leadership. Demands can be categorized into 4 groups: 1) personal, 2) situational, 3) operational, and 4) organizational. Issues that generate the demands of villagers revolve around their daily life. It is all about community characteristics. Government officials are more concerned with organizational issues; tourism and other development plans and implementations, funding and resource allocation, for example.

4.4.4 Description of Each Stakeholder Type

Stakeholders fall into seven different types within three main groups, which are interrelated and can be overlapped. From the analytical salience model exhibited in Figure 5, the more attributes (power, legitimacy, and urgency) a stakeholder is perceived to have, the greater their influence, and priority.

Latent Group - These stakeholder groups have only one attribute. Sometimes, they may not be recognized as their salience, though, existing is not yet developed or manifested. Stakeholders need to acknowledge their relative power and have a will to execute it.

1) *Dormant Stakeholders* - These are CBT stakeholders with potential. They possess means to exercise their power but have little or no interaction or involvement because they do not have legitimacy or urgency. Participation and action of this group will legitimize their position in the group activities and their demands will receive a great deal of priority given their relative power. CBT stakeholders in this category include inactive resourceful persons, officials of the forest park and the museum, district officials who are local policy makers, local investors, CBT associations, tourism agencies and organizations, educational institutions, local NGOs, media, future generations, and future returning migrants.

2) *Discretionary Stakeholders*- These stakeholders are basically village residents who have little or no interaction or involvement because they do not have power or urgency. Empowerment of this group is needed to reinforce their participation and involvement with CBT activities.

3) *Demanding Stakeholders* - They are people with urgent demands, but no legitimacy or power. Conventional and non-return tourists and provincial authorities are among stakeholders from this group.

Expectant Group - Stakeholders in the expectant group have two attributes. They are active CBT group members with expectations (for perceived benefits).

4) *Dominant Stakeholders* - This is an influencing and powerful group that drives the community to achieve its CBT goals. Community leaders and the women-based CBT groups fall into this stakeholder type.

5) *Dangerous Stakeholders* - Those with power and urgent claims will be coercive to ensure their demands are being met. This type of stakeholder is considerably irregular, and context-bound; demanding public authorities during a festive event or official visit, for instance. This group is conceptually a threat to an organization or a group that makes decisions. However, in the CBT context, this threat is regarding the shared sense that they are a community and how they want to open up to tourism development (scale). It indicates their perceived level of control over the CBT operation. If a large sum of benefits are at stake, quite often the community with weak internal controls will gradually open up and bring in more investment (mostly from outsiders) and it reaches a point where the nature of the CBT is shifting away from the left of the continuum (owned, controlled and managed by the community) to the right, where tourism stakes are largely held by outsiders.

6) *Dependent Stakeholders* - Stakeholders who are dependent on others to carry out their will, because they lack the power to claim their stake. For example, local residents who want to participate with tourism activities but lack materials, skills or knowledge to fully take part. Their interests can be advocated by dominant stakeholders, and that potentially makes them definitive stakeholders.

Definitive Group – Stakeholders in this group have all three attributes. They are the actors whose demands call for immediate attention.

7) *Definitive Stakeholders* - These stakeholders are practically dominant stakeholders with an urgent issue, or dependent groups with powerful means such as a big sum of remittance. This is the most active, core group of the CBT; they are opinion leaders or the decision making group.

4.5 Discussions

The fundamental idea of the stakeholder approach to CBT management is to allow a thorough examination of all the functions of the CBT unit. Such explication provides a clear understanding of community structures and underlines external and internal factors affecting CBT functions and its stakeholders which interact in the course of CBT activities. The stakeholder salience model is highly dynamic. The interrelation of the three domains will change as the environment evolves and as the stakeholders themselves, make decisions or change their opinions. One type of stakeholder can become another, it depends on the type of their actions and the urgency of their demands. Given the case of dormant stakeholders, for example, each group of dormant stakeholders has a potential interest in CBT and also has potential sources of power and can make the most of their power by contributing to CBT processes. Their issues stand for priority, given the degree of their possible contribution. Ban Prasat weekly commuters or migrants who work away from the village are part of the community but they are not a primary stakeholder; they have a potential to influence the process but are neither directly engaged nor essential for the achievement of CBT purposes. They might earn enough money to start a small tourism related enterprise in the village; a coffee shop, for example. Unless they execute this potential, which is presumably driven by their time availability and socio-economic interests, they will not be making a transit to the definitive stakeholder domain.

This is not always the case, it could be vice versa; the dormant commuters might be interested in investing in tourism but they don't have skills or enough start-up funds, therefore they decline participation. In Ban Prasat, those whose houses are near the pits have no interest in investing in tourism enterprises, while the interested ones are located too far away from the spot. In this case, they do not belong to a dormant stakeholder type but the discretionary one because they do not have either power (capital, time, knowledge, or skills) or urgency (interest). Therefore, their legitimacy is optional and contingent. Conceptually, empowerment is needed to enable the participation of a discretionary group. The same as local government in Ban Khok Kong, for instance, the TAO could mobilize more of their development budget towards tourism activities or the infrastructure that supports it. Anyone who only voices their needs, but without power or legitimacy, can only be described as the demanding type. It depends on the community to weigh such demand and its possible impact on the CBT.

The most influential groups of both case studies are the group of leaders, local officials, and CBT groups (which form part of the occupational groups). They possess means to exercise their power and they take part with expected outcomes that can be described as perceived benefits. Any primary stakeholder has an agenda; it is only a matter of context variation of their agenda or interest as discussed in the previous section. The dominant stakeholders are very functional and their performances are very important for CBT survival. However some of them might fall short in some areas, such as entrepreneurial skills or insightful visions. Meanwhile, the dependent type comprises of those stakeholders who participate and have certain demands i.e. earning income from tourism activities but lack relative power i.e. they are not a member of any groups, can only take part as an extra when tourism activities take place in the village. A clear example of this group is the villagers at Ban Khok Kong whose task is to line up in a greeting row when tourists arrive. They might want to do more but they do not

have skills or are not in a position that facilitates their will to be more involved. All attributes are very fluid and transitory. They can flow in all directions. Acknowledgement of each attribute is a matter of varying perceptions and is socially constructed in practice.

The explication of stakeholder salience analysis clearly unravels a complex relationship among CBT stakeholder groups, their existing power, and how their action or non-action, as well as the needs of each group, could impact tourism processes and outcomes. The core concept of stakeholder management is to give priority to those in possession of all three attributes. The problem with this analysis is that, though it explicates the layers of process dynamics and what the whole process entails (actors and their interactions), the dynamic range is too wide. The case of Ban Khok Kong gives a vivid account of such intricacies as it is a participation of the whole community. Leaders play several roles in this multi-layered stakeholder process. Some of them belong to more than one group. For instance, a TAO representative of Ban Khok Kong is a village committee member, part of a CBT leader group, and also a member of an occupational group as he and his spouse are homestay owners. The spouse’s multi-roles in the CBT process further add more layers to the web of an overlap. She heads one of many CBT function groups (cooking) and is also part of the location as well as housewife groups, and in the meantime co-runs a homestay with her husband. Similar to Ban Prasat, the village headman is a village leader; he is also part of a homestay member group, a tour guide, while his spouse leads the cooking group and is part of the homestay owner group.

As discussed in the section of stakeholder collaborative patterns, CBT management, at both villages, is a multi-layered process of stakeholder relations and interactions. Functional differentiation is a parameter for their local management. Their inclusive and non-hierarchical relationship, temporary and contingent roles and responsibilities, make CBT stakeholders interdependent with each other while involving various issues at stake. This is a process that requires an effective teamwork and task routinisation under strong leadership in directing, controlling, managing, and maintaining the whole process. It is the segmentation of the self to accommodate different functions within the group; wearing different hats (where the hat is the role). Pluralism reflected in the multiple, overlapping CBT group membership is very important for the operation of democratic societies because it deconcentrates and diffuses power.

In a number of the conditions discussed so far, group labeling makes less sense to their action, though determined by functions, is subject to the individual and the social setting. It’s clear that the multi-roles played by stakeholders, in both case studies, are a group of leading figures or the working group (*Klum Khon Tam Ngan*), who are in a powerful position to influence others and their decision making. The notion of co-managing actions and communal collaboration means that collective actions only benefit those who participate. In a business sense, including tourism in general, participation reflects a tendency towards self-interest with an individual or a firm focusing on returns of investment. Collective economic activity is always the challenge being posed by conflict of interests and profit share. Long-term benefits and a collective view tend to be undermined by desire for short-term gains. In other words, a community member should want to be in the domain of “definitive stakeholders” to make the most of the power and gain the upper hand in benefit negotiations. Yet, the nature of the CBT stakes they are holding, are mainly common stakes. It is a benefit for all, a collective community benefit, not for an individual. The challenge posed by it is, therefore, a community’s ability to be fully charged and responsible of their collective interests as well as those of their own group.

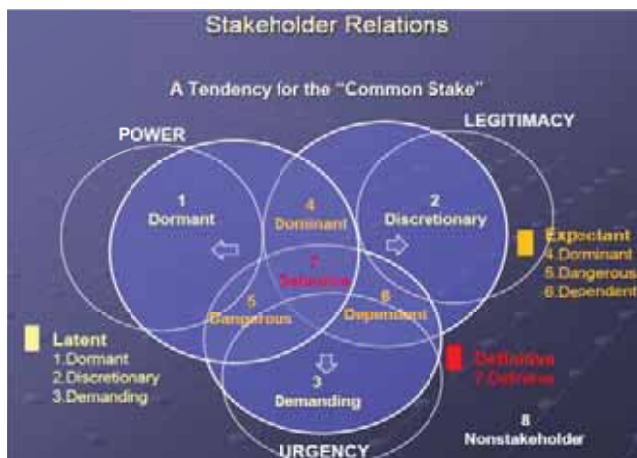


Figure 6. The dynamic relations of CBT stakeholders in diverse directions

With reference to Hardin's Tragedy of the Commons reexamined twenty-two years later by Feeny et.al. (1990), these complex and subtle processes of the CBT, where stakes are collective benefits, share the two important characteristics of common-property resources. The first is excludability or the control of access. All community members are CBT stakeholders and entitled to take part in the process. The control of access by legitimate group members is against the core concept of CBT management. Moreover, both physical and cultural community resources typically pose obvious problems of exclusion; resources belong to everyone. The second characteristic of common-property resources is that they are subtractable. Each community stakeholder is capable of subtracting the welfare of others. They may co-deliver the productivity of their resources, for instance by group work, the nature of the CBT collective work is such that the level of action by one member can affect the ability of another member to gain from the resource. Subtractability (i.e. selfishness and the problem of free riders) is the varying degree between individual and collective judgment. If one member neglects group responsibilities, others will experience an increase in their work load and it might cost them their time and energy that could enhance their individual productivity. Instead of competing and negotiating for their claims of tourism benefits, the CBT stakeholders are, consciously or unconsciously, gravitating toward subtracting from the welfare of others in the community, or the inevitability of a free-rider problem found in both case studies. The dynamic relations of CBT stakeholders could be flown in diverse directions as exhibited in Figure 6. To be practiced in a fair and equitable manner, CBT faces the dilemma where exclusion is unethical and collective action involves subtractability. Ideally, discernment belongs to everyone but in practice, some stakeholders are more equal than others. Those who are dedicated to social work carry on doing so; it is a case of where there is a lot of population in the community, but only a few citizens. These shared characteristics of common aspects underpin the nature of the CBT found in the two case studies and the nature of those who confer its legitimacy.

4.6 The Limitations of Applying a Stakeholder Approach in the CBT Context

The stakeholder approach is people-centric; it projects people as a driver of management processes. By using this approach in a CBT study, it requires the identification of all involved in the process, their relative powers, and how that influences others and the management dynamics. Community characteristics involve a complex set of people with different interests, norms, characteristics, and culture. These elements are the main components of a community-based approach where tourism is owned, controlled, and managed by its people (stakeholders). The analytical stakeholder framework requires the unfolding of the intricacies of people's interests and interrelations in a structured way; and how the whole picture (people and their settings) might be understood.

The model is clearly useful in explaining stakeholder behavior, and identifying who are very important to the group and what issues are really important and worth pursuing. However, using the stakeholder approach in CBT refers back to the fundamental dilemma of the stakeholder approach regarding whose interests, which often are contradictory, within the community should be at the forefront of tourism plans. In practice, the core concept of stakeholder management "who and what really matters" is a mere rhetorical prose of "who and who really matters", by which demand determinants vary. CBT involves a complex set of multi-scaled stakeholders who impact on functions of tourism and the community at different levels. Interest overlap and the dynamic range of the stakeholder interrelations found in both CBT communities are too contingent and transitory for a unified thought on CBT management. Even operating within a specified group, and therefore deeming to collaborate in at least some aspects, stakeholders differ in; interests, skills, resources, and engagement. Authority often has the final say on approving, rejecting, or forcing proposed projects or activities. The findings are consistent with later work of Mitchell, Agle, Chrisman & Spence (2011) on a theory of stakeholder salience in family firms. They argue that "where principal institutions intersect i.e. family and business, managerial perceptions of stakeholder salience will be different and more complex than those based on a single dominant logic".

5. Conclusion

The contribution from the community-based approach is the underlying power of the community leaders who have a total control over tourism resources and underpin the CBT processes; identify types of CBT leader powers and define community-based leadership. Given the common nature of CBT stakes, this study points out the significance of local leadership in community building and reinforcing citizen responsibility through CBT management processes. It indicates that a viable community-based management approach, which incorporates institutional arrangements and cultural factors, can potentially help by strengthening people's participation and citizen solidarity through community-based processes and collective leadership. All tourism stakeholders, who are implicated by tourism, can influence the scale and pace of tourism development and its management.

Communities may not benefit directly from this study but the message is very important for policy formulation and implementation in strengthening communities and their people through local democratic structures and

social activities such as CBT. Sustainable tourism practices are all about local control and how the community manages to work together. It is a matter of how resources have been used, allocated, and governed by all community stakeholders. CBT is an educational process: it is both a mechanism and a process that trains and educates the community to be self-regulated and self-reliant in managing the web of their diversified livelihoods. Women's roles and impacts on the CBT processes are very important and should be continuously strengthened through capacity building initiatives. Experiences from the CBT local management in this study reaffirm the value and applicability of context-bound approaches to sustainable tourism development.

However, the application of organization-based concepts in community settings, where interests are not restricted to the specified objectives of such activities, is inherently problematic. Normative legitimacy is another form of power. Given the common nature of CBT stakes, the stakeholder framework accentuates leadership dependence and a demand for continuity of collective consciousness; a moral burden laid on the shoulders of all community "legitimate" stakeholders.

References

- Bennett, N., Lemelin, R. H., Koster, R., & Budke, I., (2012). A capital assets framework for appraising and building capacity for tourism development in aboriginal protected area gateway communities. *Tourism Management*, 33(4), 752–766. <https://doi.org/10.1016/j.tourman.2011.08.009>
- Butler, R. W. (1980). The concept of a tourist area cycle of evolution: implications for management of resources. *Canadian Geographer*, 24, 5-12. <https://doi.org/10.1111/j.1541-0064.1980.tb00970.x>
- Coria, J., & Calfucura, E. (2012). Ecotourism and the development of indigenous communities: the good, the bad, and the ugly. *Ecological Economics*, 73, 47–55. <https://doi.org/10.1016/j.ecolecon.2011.10.024>
- Cole, S., & Morgan, N. (2010). *Tourism and Inequality: Problems and Prospects*. CAB international. <https://doi.org/10.1079/9781845936624.0000>
- Feeny, D., Berkes, F., McCay, B., & Acheson, J. M. (1990). The Tragedy of the Commons: Twenty-Two Years Later. *Human Ecology*, 18(1), 1-19. <https://doi.org/10.1007/BF00889070>
- Freeman, R. E., (1984). *Strategic Management- A Stakeholder Approach*. MA, Boston: Pitman.
- Hall, M. (2007). Tourism, Governance and the (mis-)location of Power. In A. Church, & T. Coles (Eds.), *Tourism Power and Space: Contemporary geographies of Leisure, Tourism and Mobility*. Oxon, UK: Routledge
- Jeffries, D. (2001). *Governments and Tourism*. Oxford, UK: Butterworth-Heinemann.
- Lacher, R., & Nepal, S. (2010). Dependency and Development in Northern Thailand. *Annals of Tourism Research*, 37(1), 947-968. <https://doi.org/10.1016/j.annals.2010.03.005>
- Lortanavanit, D. (2009). Decentralization, Empowerment and Tourism Development: Pai Town in Mae Hong Son, Thailand. *Southeast Asian Studies*, 47(2).
- Mathieson, A., & Wall, G. (1995). *Tourism: Economic, Physical & Social Impact*. Longman Group Limited.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management Review (Academy of Management)*, 22(4), 853-886. <https://doi.org/10.5465/AMR.1997.9711022105>
- Mitchell, R. K., Agle, B. R., Chrisman, J. J., & Spence, L. J. (2011). Toward a Theory of Stakeholder Salience in Family Firms. *Business Ethics Quarterly*, 21(2), p. 235-255. <https://doi.org/10.5840/beq201121215>
- Murphy, P. E. (2005). Tourism and Sustainable Development. In W. F. Theobald (Ed.), *Global tourism: The next decade* (3rd ed.), Oxford:Butterworth-Heinemann.
- Phillips, R. (2003). *Stakeholder Theory and Organizational Ethics*. San Francisco: Berrett-Koehler Publishers.
- Ruiz-Ballesteros, E. (2011). Social-Ecological and Community-Based Tourism: An approach from Agua Blanca, Ecuador. *Tourism Management*, 32, 655-666. <https://doi.org/10.1016/j.tourman.2010.05.021>
- Telfer, D., & Sharpley, R. (2008). *Tourism and Development in the Developing World*. Routledge Perspectives on Development, Oxon, UK: Routledge

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Relationship between Leisure Facilitators and Serious Leisure among Female Korean College Soccer Participants

Hee Yeob Kang¹, Hyung Hoon Kim², Hyun Wook Choi¹, Won Il Lee³ & Chul Won Lee¹

¹ Department of Sport Industry Studies, Yonsei University, Seoul, Republic of Korea

² Department of Taekwondo & Security, Honam University, Gwangju, Republic of Korea

³ The Graduate School of Education, Yonjin University, Yonjin, Republic of Korea

Correspondence: Chul Won Lee, Department of Sport Industry Studies, Yonsei University, Seoul, Republic of Korea. Tel: 82-2-2123-3186. E-mail: wakeford@yonsei.ac.kr

Received: February 2, 2017

Accepted: February 13, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p117

URL: <https://doi.org/10.5539/ass.v13n4p117>

Abstract

This study identifies the relationship between leisure facilitators and serious leisure of female college soccer participants. To this end, data were collected from a total of 223 surveys from participants in female college soccer participants. The collected data were analyzed and interpreted using SPSS and AMOS program. Frequency analysis, confirmatory factor analysis, reliability analysis, correlation analysis and multiple regression analysis were performed. All tests were performed using a .05 significance level. The results of this study were as follows. First, intrapersonal facilitators of leisure facilitators had a positive effect on serious leisure. Second, interpersonal facilitators of leisure facilitators had a positive effect on serious leisure. Third, structural facilitators of leisure facilitators had a positive effect on serious leisure.

Keywords: leisure facilitators, serious leisure, female college soccer

1. Introduction

1.1 Introduction

Participation in sports during leisure time has gradually increased in Korean society. According to a survey on citizens' sports participation (September 9, 2015), the rate of participation in sports activities once a week or more was steadily increasing from 39.90% participated in 1989 to 42.4% in 2008 than 45.5% in 2013. As of 2010, these figures were similar to those from the Netherlands (56%) and France (50%) where life sports were a well-developed part life (The Ministry of Culture, Sports and Tourism, 2015).

As mentioned above, the popularity of sports participation in during leisure time shows a tendency to extend throughout all social groups in Korea. In particular, the participation of female college students in sports is noticeably rising. The relevant reasons are an increase in the attention paid toward health, the establishment of sports-friendly environments for female college students, and the growth of social support for female college students.

Adult participation in sports has psychological, physical, and social benefits. The advantages of physical leisure activities can motivate adults to engage in physical activities during leisure time. In particular, the participation of female adults in sports requires the overcoming of a variety of leisure constraints (Crawford, Jackson, & Godbey, 1991; Hubbard & Mannel, 2001; Jackson, 1993; Jackson, Crawford, & Godbey, 1993; Kim, Heo, Chun, & Lee, 2011). To overcome such constraints, a stimulus or motive for leisure activity is important. To encourage female college students to seriously participate in leisure activities, factors that promote such leisure activities should exist (Dilley & Scraton, 2010; Stebbins, 2001).

Considering that some people actively participate in leisure activities despite of individual leisure constraints and that others have negative attitudes toward leisure activities even in the absence of individual leisure constraints, we cannot assume that simply the existence of leisure constraints determines engagement in leisure activities. Sometimes, individuals with various constraints restricting their participation in sports activities, such as those who have experienced physical injuries or traumas, continue to engage in sports due to the influences of leisure (Calhoun & Tedeschi, 1999; Stains, Schnider, Chavez, & Shinew, 2009). Chun and Lee (2008) state that leisure

participation can provide unique competence development, meaningful relationship construction, personal implication formation, and positive emotional development for individuals with spinal cord injuries with under the psychological limitations; these unique advantages can act as significant motives for leisure activities. Thus, in addition to constraints, a variety of psychological factors should be considered in leisure participation.

In this regard, Raymore (2002) suggests a theory of leisure facilitators to understand leisure constraints as well as participation in leisure activities. Leisure constraints negotiation and leisure facilitators function simultaneously in the case of participation and non-participation in leisure activities. By supplementing the existing theory of leisure constraints, which states that the alleviation of leisure constraints can lead to participation in leisure activities, the theory of leisure facilitators presents the concept of factors that enhance leisure participation.

Therefore, this study analyzes the factors of facilitators and their relations to serious leisure participation, targeting female college students who play soccer during their leisure time, and suggests the significance of leisure facilitator as an impetus that leads female college students to be immersed in soccer.

1.2 Leisure Facilitators and Serious Leisure

Leisure facilitators is classified as intrapersonal, interpersonal, and structural facilitator based on the structure of the leisure constraint, a major factor in the determination of individual leisure activity participation positively affecting the participation (Raymore, 2002). Previous studies have found that leisure facilitator induce continual leisure activities and positively influence recreation specialization and flow experiences (Korotkov, McLean, & Hamilton, 2011; Sa, Lee, Kim, Chun, & Nam, 2015; Lewis, Patterson, & Pegg, 2013).

Raymore (2002) defines leisure facilitators as a factor that forms a leisure preference or increases leisure activity participation. In previous studies, leisure facilitators have been proposed as a crucial factor for attracting constant leisure activities and positively impacting serious leisure (Lawton, 1994; Sa et al., 2015). Lawton (1994) states that passionate individuals are likely to be immersed in leisure activities and their personal characteristics promote their engagement in leisure activity. Sa et al. (2015) identify recreation professionalization to improve the levels of leisure facilitator perceived by women participating in running events.

Recently, the participation of female college students in sports activities has increased in Korea. Female students are experiencing new sports games through student groups. The number of those who are engage in soccer has increased greatly; female students are, participating actively in soccer activities based on professional skill and knowledge (Jo, 2011). This phenomenon is exemplified by the increase in female college students participating in soccer competitions. Thus, female college students participating in soccer competitions can be regarded to be engaged in soccer activities as serious leisure, beyond everyday leisure (Lewis et al., 2013; Mackellar, 2009; Siegenthaler & O'Dell, 2003; Stebbins, 1992; Stebbins, 2001). Stebbins' (1982) serious leisure was first applied to identify leisure participant's behavior and characteristics in leisure study sector. Serious leisure are show from armature, hobbyist, and volunteer which defined as obtaining professional skill and knowledge pursuing professionalism. The characteristics of serious leisure are persevere, career, personal effort, durable benefit, strong identity, and unique ethos. We could possibly assume that female college soccer participants are participating soccer as serious leisure since they gained technical skills and knowledge as well as professionalism during the soccer tournament (Stebbins, 1992).

Therefore, factor of the leisure facilitator must be analyzed in terms of female college students engaged in continued soccer activities. In the field of leisure studies, there have not been sufficient studies to examine the relationships between leisure facilitator and serious leisure. To explore the engagement in leisure activity, in-depth studies on leisure facilitator factors as well as leisure constraints factors should be conducted. In this context, this study tries to investigate the empirical relations between leisure facilitator and serious leisure, targeting female college students engaged in soccer activities through college student groups. Because the purpose of this study is to identify the relationships between leisure facilitator and serious leisure among female college students soccer participants, our hypothesis was set as follows.

Hypothesis 1. Intrapersonal facilitator has a positive effect serious leisure.

Hypothesis 2. Intrapersonal facilitator has a positive effect on serious leisure.

Hypothesis 3. Structural facilitator has a positive effect on serious leisure.

2. Method

2.1 Participants and Procedure

The women sampled in this study were chosen from among female college students who participated in soccer in

college sport club. Data were collected during a women's soccer tournament on May 9, 2015. The researcher visited female college soccer tournament and done questionnaires. Questionnaires are distributed and gathered from the participants after the explanation about the purpose of the study. The researcher requested the participants to fill in the survey on voluntary basis and the participants completed the survey for approximately 10 minutes. Completed surveys were immediately collected. A total of 240 questionnaires were distributed to the tournament participants. A self-administration method was used to fill out the questionnaires. Finally, 240 questionnaires were collected and, after the removal of incomplete surveys, 223 questionnaires were used for data analysis. A summary of the general characteristics of the study is shown in Table 1.

Table 1. Demographic characteristics of participants

	classification	N	%
Year	Freshman	64	28.7
	Sophomore	58	26.0
	Junior	60	26.9
	Senior	41	18.4
Frequency of leisure activity	1 day	50	22.4
	2 days	120	53.8
	3 days	34	15.2
	4 days or more	19	8.5
Duration of leisure activity	Under 1 years	74	33.2
	1 - 2 years	57	25.6
	2 - 3 years	38	17.0
	3 - 4 years	25	11.2
Daily leisure activity time	4 years or more	29	13.0
	Under 2 hours	72	32.2
	2 - 3 hours	117	52.5
	3 hour or more	34	15.2

2.2 Measurements

The questionnaire method was the research method used in this study. This method was used to examine the relationship between leisure facilitators and serious leisure among women's soccer participants.

First, to analyze the basic demographic characteristics, a questionnaire was disseminated that examined four factors: college year, participation frequency, participation duration, and daily leisure activity time. Since the study aimed female college student, grade included to the general characteristics than age.

Second, Leisure facilitators was measured using a questionnaire used by Song and Lee (2006) for a leisure facilitator analysis of a five-day school system for the youth. This questionnaire, consisting of three factors of 11 items, was used in this study. Leisure facilitator scale was taken from Raymore (2002) and was modified by Song and Lee (2006) to fit the study. The sub-factors of leisure facilitator include intrapersonal facilitator (three questions), interpersonal facilitator (three questions), and structural facilitator (five questions).

Third, the serious leisure scale was first developed by Stebbins (1992) and was modified by Tsaur & Liang (2008); its six factors in 18 questions are: persevere, career, personal effort, durable benefit and rewards, strong identify, and unique ethos. The value was calculated by using mean value of each factor. Questionnaires were measured on a five-point Likert scale ranging from "Strongly disagree" (1) to "Strongly agree" (5).

2.3 Data Analysis

The complete data were analyzed after coding, using the programs SPSS and AMOS for Windows. The procedure for data analysis is as follows.

To define demographic information for the respondents to the questionnaire, a frequency analysis was conducted. To test the reliability of the scales, Cronbach's α coefficient, which is a measure of internal consistency between questions, was calculated. All alpha coefficients were above the cut-off point of 0.7, indicating an acceptable level of reliability for each construct (Nunnally, 1978). To test construct validity, confirmatory factor analysis was conducted. Confirmatory factor analysis was conducted rather than exploratory factor analysis in this study because scales used in this study have been verified for construct validity in previous studies (Kline, 2015).

For sufficient level of convergent validity for the measurement model, All AVE and CR values for the multi-item scales must appear greater than the minimum criteria of 0.5 and 0.7, respectively (Hair, Black, Babin, Anderson, & Tatham, 2006). For sufficient level of discriminant validity, the AVE of each construct must appear greater than the squared correlation coefficients for corresponding inter-constructs (Fornell & Larcker, 1981). Serious leisure scale combined to single measure variable through item parceling after construct validity verification. The study followed previous research (Chen, 2014) on combining single measure variable of 6 sub-factor of serious leisure, and based on that the study analyzed single factor from 6 sub-factor through unidimensionality item parceling. Correlation analysis was conducted on each factor to confirm the correlation coefficients and to test the multicollinearity. Multicollinearity must be tested as it is general problem. Two independent variables having a correlation coefficient of 0.7 or higher may weaken the results of the analysis (Tabachnick & Fidell, 2001). The relationship between leisure facilitators and serious leisure was analyzed through multiple regression analysis.

3. Results

3.1 Validity and Reliability Test

Before the regression analysis was conducted, the reliability and construct validity of the scale used in this study were tested. Reliability analysis was conducted by using Cronbach’s α coefficient. The value of Cronbach’s α was from 0.714 to 0.880, which supports the clear internal consistency of the measurement instrument. Confirmatory factor analysis was conducted to test the construct validity of the scale. The measurement model derived from the CFA showed satisfactory levels of on all goodness-of-fit. Convergent and discriminant validity were performed to verify construct validity. To verify convergent validity, all average variance extracted (AVE) and composite reliability (CR) values for the multi-item scales were utilized. Accordingly, CR and AVE were calculated for every factor to test convergent validity. All AVE and CR values for the multi-item scales were greater than the minimum criteria of 0.5 and 0.7, indicating a sufficient level of convergent validity for the measurement model. To verify the discriminant validity of the constructs, the most conservative method, using AVE, confirmed that the discriminant, as the highest squared correlation between intrapersonal leisure facilitators and durable benefit (.363), was smaller than the AVE for corresponding inter-constructs(.560 - .759). This result confirms that there was a sufficient level of discriminant validity in the measurement model. The results of reliability and construct validity are shown in Table 2 and 3.

Table 2. Model fit of measurement model

	χ^2	<i>df</i>	TLI	CFI	RMSEA
Leisure facilitators	86.19	39	0.925	0.947	0.074
Serious leisure	258.04	136	0.923	0.939	0.064

Table 3. Results of CFA for the Measurement Model

Item	Factor loading	CR	AVE	α
Serious Leisure				
Even if I am busy, I take part in soccer	.648			
Even if I am tired, I take part in soccer	.825	.845	.647	.767
Even if skill doesn’t improve, I keep trying	.648			
I have special knowledge on soccer	.687			
I have required skill to participate soccer	.773	.779	.639	.714
I try to develop my soccer skill	.802			
I try to acquire advanced knowledge on soccer	.740	.899	.749	.835
I try to achieve my goal on soccer	.830			
Soccer gave me an accomplishment	.802			
Soccer makes me feel refreshed	.905			
I am very satisfied with participating soccer	.870	.924	.759	.863
Soccer helps me to build social relationship	.572			
When introducing myself, I always mention about leisure activity	.880			
Leisure activity I participate in is my typical characteristic	.750	.894	.740	.880
Soccer and I feel a sense of unity	.900			
I feel identity with others who participate in soccer	.795	.820	.605	.768

I know the unique ethos of others who participate in soccer	.696			
I have same goal with others participating in soccer together	.681			
Leisure Facilitators				
I decide on my own to participate in soccer	.705			
I have the confidence to participate in soccer	.813	.789	.560	.726
I am active in terms of characteristics	.567			
I have partners with whom to participate in soccer	.862			
I have a person to guide soccer activity	.726	.818	.607	.741
I have family members with whom to participate in soccer	.556			
A 5-day work system supports my leisure activities	.669			
There are enough soccer facilities in which to participate in the community	.644			
There are soccer facilities around my house	.660	.842	.518	.843
I have enough time to enjoy soccer	.745			
My family supports my soccer activity very well	.751			

3.2 Correlation Analysis

To examine the relationship between the sub-dimensions of leisure facilitators and serious leisure, Pearson’s product moment correlation coefficient was calculated. According to the results of the correlation analysis, there was a positive and significant relationship between the sub-dimensions of leisure facilitator and serious leisure. All dimensions of leisure facilitators are significantly positively correlated with serious leisure. Specifically, Intrapersonal facilitators had the highest correlation with serious leisure.

In addition, before multiple regression analysis was conducted, multicollinearity must be tested as it is general problem. As Table 4 indicates, the correlation coefficient among variables in this study ranged from .339 to .655. The results of correlation analysis in this study indicate that there were no multicollinearity problems. The results of correlation analysis are as displayed in Table 4.

Table 4. The results of correlation analysis

	1	2	3	4
1. Intrapersonal facilitator	1			
2. Interpersonal facilitator	.348***	1		
3. Structural facilitator	.339***	.348***	1	
4. Serious leisure	.655***	.382***	.366***	1

* $p < .05$, ** $p < .01$, *** $p < .001$

3.3 Relationship between Leisure Facilitator and Serious Leisure

To examine the relationship between leisure facilitators and serious leisure among female college soccer participants, multiple regression analysis was conducted. The results of the analysis on the effect of leisure facilitators on serious leisure are shown in Table 5. All the sub-factors of leisure facilitator had an effect on serious leisure. The factor that was found to have the most influence on serious leisure among female college soccer participants was the intrapersonal facilitator ($\beta=.535$), followed by the structural facilitator ($\beta=.156$) and the interpersonal facilitator ($\beta=.152$). The value of R^2 was 0.464, which means it explains 46.4% of the total variation. The value of F was 63.169, which was statistically significant ($p<.001$).

Table 5. Results of multiple regression analysis

	B	SE	β	t
1. Intrapersonal facilitator	.334	.034	.535	9.813***
2. Interpersonal facilitator	.097	.035	.152	2.777**
3. Structural facilitator	.091	.032	.156	2.861**

$F = 63.169^{***}$, $R^2 = 0.464$

* $p < .05$, ** $p < .01$, *** $p < .001$

4. Discussions

This study analyzes the factors of leisure facilitators that affect individual participation in leisure activities.

Although previous studies on leisure participation have focused on leisure constraints in general, leisure facilitators is also thought to be a significant factor for the participation in leisure activities. Therefore, this study analyzes the relationships between leisure facilitators and serious leisure in order to understand the leisure behaviors of female college students participating in soccer.

We have found that intrapersonal facilitator positively affects serious leisure among their factors of leisure facilitators. Iso-Ahola (1999) observes that individual motives, values, and personalities are critical elements for the promotion of leisure activities, which means that internal motivation and promotion significantly affect leisure activity participation (Song & Lee, 2006; Yarnal & Doweler, 2002). Female college students who play soccer also voluntarily select soccer according to their individual preferences and participate in serious leisure. Lawton (1994) suggests that individuals with enthusiasm who deeply engage in leisure activities also engage in serious leisure participation.

We have also found that interpersonal facilitator positively affects serious leisure. Collaborating with and encouragement from friends and sharing successful leisure experiences with acquaintances relates positively to the participation in physical activity for female adolescents (Bungum & Vincent, 1997). Csikszentmihalyi and Kleiber (1991) state that support from family members or colleagues in the performance of important roles conducts to special experiences in leisure activities. Passmore and French (2001) demonstrate that social interactions are significant for adolescents' leisure activities, and thereby enhancing their engagement.

Soccer as a group activity is naturally linked to serious leisure when the interpersonal facilitator preceded it. Sa et al. (2015) confirm that the interpersonal facilitator of women in running events positively affects the recreation specialization that develops through continual leisure activity participation, which support the findings of this study. This implies that serious leisure activities of individual require interpersonal facilitator from friends and peers (Ditton, Loomis, & Choi, 1992).

Finally, we have found that structural facilitator positively affects serious leisure. Raymore (2002) defines a structural facilitator as a social system, institution, and value frame that can foster and reinforce the preference for leisure activity participation. The endeavor factor of serious leisure that structural facilitator manifest can be described as a tendency of continuous attempts for achieving the objectives of leisure activities or competence betterment. To strengthen the preference of female college students playing soccer and attracting their continued engagement, structural facilitator should become the foundation of institutions, environments, and social systems (Henderson & Bialeschki, 2005). In this sense, Treiber, Baranowski, Bradin, Strong, and Knox (1991) state that social support positively influence continual engagement in sports activities.

This study has the three following limitations. First, the leisure facilitators of female students engaged in soccer were measured without the measurement of leisure constraint negotiation strategies. Therefore, follow-up studies should analyze leisure constraint negotiation strategies and leisure facilitators in integrated ways. Second, studies to analyze the relationships between leisure facilitators and serious leisure, targeting female college students who participate in individual activities, including swimming, yoga, running, and fitness, in addition to group activities such as soccer are required because female college students in Korean society more frequently engage in individual sports than group sports such as soccer or baseball. Third, the control variables, such as age, gender, participation level, was not considered. Therefore, following study should include those control variables to complete more accurate result.

Despite its limitations, this study identifies a positive relationship between leisure facilitators and serious leisure among female college students. Although the majority of previous studies barely cover the effects of leisure facilitators for serious leisure, this study suggests the value of leisure facilitators for the participation of female college students.

References

- Bungum, T. J., & Vincent, M. L. (1996). Determinants of physical activity among female adolescents. *American Journal of preventive medicine, 13*(2), 115–122.
- Calhoun, L. G., & Tedeschi, R. G. (1999). *Facilitating posttraumatic growth: A clinician's guide*. Mahwah, NJ: Lawrence Erlbaum.
- Chen, K. Y. (2014). The relationship between serious leisure characteristics and subjective well-being of older adult volunteers: The moderating effect of spousal support. *Social indicators research, 119*(1), 197-210. <https://doi.org/10.1007/s11205-013-0496-3>
- Chun, S., & Lee, Y. (2008). The experience of posttraumatic growth for people with spinal cord injury. *Qualitative Health Research, 18*(7), 877–890. <https://doi.org/10.1177/1049732308318028>

- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure sciences*, 13(4), 309–320. <https://doi.org/10.1080/01490409109513147>
- Csikszentmihalyi, M., & Kleiber, D. A. (1991). Leisure and self-actualization. *Benefits of leisure*, 91–102.
- Dilley, R. E., & Scraton, S. J. (2010). Women, climbing and serious leisure. *Leisure Studies*, 29(2), 125–141. <https://doi.org/10.1080/02614360903401927>
- Ditton, R. B., Loomis, D. K., & Choi, S. (1992). Recreation Specialization: Re-conceptualization from a social world's perspective. *Journal of Leisure Research*, 24, 33–51.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39–50. <https://doi.org/10.2307/3151312>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Henderson, K. A., & Bialeschki, M. D. (2005). Leisure and active lifestyles: Research reflections. *Leisure Sciences*, 27, 355–365. <https://doi.org/10.1080/01490400500225559>
- Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences*, 23(3), 145–163. <https://doi.org/10.1080/014904001316896846>
- Iso-Ahola, S. E. (1999). Motivational foundations of leisure. *Leisure studies: Prospects for the twenty-first century*, 35–51.
- Jackson, E. L. (1993). Recognizing patterns of leisure constraints: Results from alternative analyses. *Journal of leisure research*, 25(2), 129.
- Jackson, E. L., Crawford, D. W., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure sciences*, 15(1), 1–11. <https://doi.org/10.1080/01490409309513182>
- Jo, E. J. (2010). *A study on the Characteristics of the Sub-culture of Female College Soccer Players*(Unpublished Master's thesis). Sookmyung Women's University, Seoul, Korea.
- Kim, B., Heo, J., Chun, S., & Lee, Y. (2011). Construction and initial validation of the leisure facilitator scale. *Leisure/Loisir*, 35(4), 391–405. <https://doi.org/10.1080/14927713.2011.648402>
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
- Korotkov, D., McLean, H., & Hamilton, L. (2011). Predicting leisure satisfaction: A comparative analysis of the agency and communion model with the five-factor model of personality. *The American Association of Behavioral and Social Sciences Journal*, 15, 1–20.
- Lawton, M. P. (1994). Personality and affective correlates of leisure activity participation by older people. *Journal of Leisure Research*, 26(2), 138.
- Lewis, J., Patterson, I., & Pegg, S. (2013). The serious leisure career hierarchy of Australian motorcycle road racers. *World Leisure Journal*, 55(2), 179–192. <https://doi.org/10.1080/04419057.2013.782563>
- Mackellar, J. (2009). An examination of serious participants at the Australian Wintersun festival. *Leisure Studies*, 28(1), 85–104. <https://doi.org/10.1080/02614360802613879>
- Ministry of Culture, Sports and Tourism (2015). *Survey on citizens' sports participation*. http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=1658. (07/06/2016).
- Nunnally, J. C. (1978). *Psychometric theory*. New York, McGraw-Hill.
- Passmore, A., & French, D. (2001). Development and administration of a measure to assess adolescents' participation in leisure activities. *Adolescence*, 36(141), 67.
- Raymore, L. A. (2002). Facilitators to Leisure. *Journal of Leisure Research*, 34(1), 37–51.
- Sa, H. J., Lee, C. W., Kim, M. J., Chun, S. B., & Nam, S. B. (2015). Leisure Facilitators and Recreation Specialization for Female Participants in Running Events. *Asian Social Science*, 11(27), 175. <https://doi.org/10.5539/ass.v11n27p175>
- Song, Y. M., & Lee, h. (2006). Analysis structural equation model of leisure facilitators: Focused on the five-day classweek system in school. *Journal of Tourism and Leisure Research*, 18(2), 7–24.
- Stanis, S. A. W., Schneider, I. E., Chavez, D. J., & Shiness, K. J. (2009). Visitor constraints to physical activity in

park and recreation areas: Differences by race and ethnicity.

- Stebbins, R. A. (1982). Serious leisure: A conceptual statement. *Pacific Sociological Review*, 25(2), 251-272. <https://doi.org/10.2307/1388726>
- Stebbins, R. A. (1992). *Amateurs, professionals, and serious leisure*. Montreal, Canada: McGill-Queen's University.
- Stebbins, R. A. (2001). *New directions in the theory and research for serious leisure. Mellen studies in sociology* (Vol. 28). Lewinston, NY: Edwin Mellen Press.
- Treiber, F. A., Baranowski, T., Braden, D. S., Strong, W. B., Levy, M., & Knox, W. (1991). Social support for exercise: relationship to physical activity in young adults. *Preventive medicine*, 20(6), 737-750. [https://doi.org/10.1016/0091-7435\(91\)90068-F](https://doi.org/10.1016/0091-7435(91)90068-F)
- Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). *Using multivariate statistics*.
- Tsaur, S. H., & Liang, Y. W. (2008). Serious leisure and recreation specialization. *Leisure Science*, 30(4), 325-341. <https://doi.org/10.1080/01490400802165115>
- Yamal, C. M., & Dowler, L. (2002). Who is answering the call? Volunteer firefighting as serious leisure. *Leisure/Loisir*, 27, 161-190. <https://doi.org/10.1080/14927713.2002.9651302>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

A Study on the Cultivation of Female Students Ability in the Girl's Athletic Association-Taking Qingdao University of Science and Technology as an Example

Xiaodong Chu¹ & Xiaowen Liu¹

¹Institute of Physical Education, Qingdao University of Science and Technology, Qingdao, China

Correspondence: Xiaodong Chu, Institute of Physical Education, Qingdao University of Science and Technology, No. 99 Songling Road, Qingdao, China. E-mail: xiaodongchu@126.com

Received: February 6, 2017

Accepted: February 27, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p125

URL: <https://doi.org/10.5539/ass.v13n4p125>

Abstract

This paper studied the status of o the Girl's Athletic Association in the matter of the organization and function. Some problems in development progress are analyzed, such as the number of members reduced, the chaos of organization construction, the shortage of fund. Some proposals and countermeasures are putted forward from strengthen and improving the organization system construction, carrying out rich and colorful activities, the funding, hiring teachers and the association responsible person, increasing the association activity time, changing the content of activities To play an important role in the aspects of actively encouraging and guiding the female classmate association activities, and promoting the all-round development of girl's ability.

Keywords: ability cultivation, Girl's Athletic Association, organizational construction, strategy

1. The Established Background of the Girl's Athletic Association in Qingdao University of Science and Technology

Now, with cognition and attitude on sports have a huge change, college student take more attention on strengthening their physical quality. Under the background of new era, many female sports enthusiasts have emerged, they expect to have more opportunities to participate in sports activities, but no organization and opportunity like this. In this context, Li Cheng, one of the Qingdao University of Science and Technology students, produced the idea that developing the girl's athletic association. At firstly, she developed the roommate and students. To later, the number is more and more, and finally the Qingdao University of Science and Technology girl's athletic association was established in April 2005.

The chief sponsor of the Qingdao University of Science and Technology girl's athletic association had a total of 11 students, such as Li Cheng, Xiaochen Liu, Cuicui LI, and so on. At the beginning of the association was set up, the promoters into Li Cheng was the first chairman of the Qingdao University of Science and Technology Girl's Athletic Association, the founder Xiaochen Liu, Cuicui Li was vice president, the sponsor Yanhong Wang was outreach minister, the sponsor Shuqing Xie was publicity minister, the founder Xiumei Mou was secretary, Wei Li served as Minister of planning launched.

In order to attract the majority of women's sports enthusiasts to participate in a variety of campus sports activities, increase students' interests and hobbies, the Girl's Athletic Association organized a variety of sports events. The association also encouraged and helped the masses of women's sports fans to openly take on the stadium, active, moving up, unite. Simultaneously, the association created conditions, so that women's sports fans dared to stand on the stadium for releasing their own enthusiasm, better participate in sports activities. At the same time, the association hired tutors to give technical guidance for guaranteeing the security and technical, so that the majority of women sports enthusiasts participated in exercise at ease. Association also be concerned about the physical and mental health of the members, for creating a healthy and beautiful image of youth, exercising a healthy body, honing the tough character of members. The association was committed to the friendly association with other societies, will strengthen the links with other school sports enthusiasts, exchange of experience and lessons. At the same time, the development of the Girl's Athletic Association was also facing new opportunities and challenges. So this paper is based on the background of the Qingdao University of Science and Technology Girl's Athletic Association

1.1 Purpose and Significance of the Study

Qingdao University of Science and Technology Girl's Athletic Association was founded in 2005. For its original intention, the establishment of the association is very meaningful and very worthy of our attention and thinking. First of all, it is a spontaneous formation of Girl's Athletic Association, and it was headed to launch by a hobby movement of female student Li Cheng. This reflects that some out of the ordinary young women are cultivated under the new era and a new trend. They are different from the traditional female image which is rigid and conservative, they love sports and eager to expand their team and find more like-minded people, and hope to provide a platform for more women sports enthusiasts. All of this is a spirit and platform support for women's sports enthusiasts. Secondly, the Girl's Athletic Association has been launched with the support and recognition of the school, it also reflects the school is to keep pace with the times, an open mind to accept the society inject more vitality into the Qingdao University of Science and Technology. Therefore, the study of Girl's Athletic Association has certain significance and value of depth. We need to standardize association management, and make the activities more diverse, to attract more women to participate in sports enthusiasts, to reach everyone consciously to participate in physical exercise and to enrich the cultural life of the campus. At the same time, the training can cultivate the organizer's ability of organization and management, and increase the awareness of the members, to improve their health indicators.

1.2 The Present Management Situation of the Girl's Athletic Association in China

1.2.1 Rapid Increase in the Number of Associations

In recent years, with the national education reform, strengthened and improved ideological and political education as an important and urgent strategic was tasked on the agenda, the aim was that comprehensively promoting quality education, implementing "prospering the nation with science and education" strategy and talent strategy". On request of cultivating Chinese socialism characteristics qualified builders and reliable successors, College Students' Sports Association work was strengthened and the improved. The development of College Students' Sports Association has been paid more attention by the state, society and universities (Zuo, & Xie, 2003).

1.2.2 Serious Imbalance in the Structure of the Association

In accordance with the content division, University Sports Associations can be divided into sports, football, volleyball, skating and so on. But the number of all kinds of associations and activities carried out in number but far, and a serious imbalance in society structure, such as the number of football, sports and other public sports association increased rapidly, and relatively perfect organizational structure. Others less popular activities are simple in structure. The activities of the sports associations are relatively simple, only focused on some internal competition and guidance internally (Xu, 2003). This has led to the low-level duplication of college sports associations, such as the repeated association of some football equivalent projects, or the overlap of activities such as outdoor associations and rock climbing associations. At the same time, it will cause the blind competition for resources, such as some associations in order to fight for the members and the venue and the unpleasant friction (Huang, 2003). There will also be cohesion within the association is not strong, the lack of innovation and creativity, and other issues.

1.2.3 Association Lacks Professional Guidance

University Sports Associations rarely get professional guidance. Some associations do not even have professional guidance teachers. The most of existing guidance teachers are school group cadres. They only provide assistance and guidance from organizing activities. And the guidance ability and scope are limited (Fan, Gu, & Wang, 2000). One reason is that many teachers own that one cannot be in two places at once facing the pressure of the teaching and research, On the other hand, school without the corresponding incentive mechanism to guide the work of the association.

1.2.4 Poor Continuity of the Association, Sustainable Development Capacity Is Weak

According to the survey results of some societies, most of the students think that the continuity of the association is poor, among of them, they think that the liquidity of the college students' association is too large. Through the study of some representative associations found that most charge person of the association are only one year. At the same time, the ratio of adhering to organize the activities is low each semester. Some of the association is not strong vitality, is exist in name only.

2. Situation and Analysis of Qingdao University of Science and Technology Girl's Athletic Association

2.1 Organization Setting

The organization of the association is composed of the tutor, the president, the ministers and the captain. The person in charge at all levels shall be elected or elected democratically. The person responsible for the nomination proposal dismissal, need the approval of the number of main member institutions by 2/3 before implementation, and the president of institutions respects the decision. The executive agency includes operating duty, organization department, propaganda department, technical department, secretary, ministry of construction network.

Table 1. Executive Council of Girl's Athletic Association

Executive agency	Position setting	Number of people	Operating duty
Operating duty	Chairman	1	The overall plan as a whole, personnel arrangement, and responsible for the overall plan spending in the activities organized by the general assembly, held on the main responsibility of the Basketball Association out and in.
	Vice chairman	1-2	Responsible for the implementation of specific work plan.
	Minister	1	To ensure the normal and orderly internal association activities sponsored by the Department responsible for the association of sports events, do a good job organize and coordinate the work in the game, teams attended the Basketball Association meeting; arrange the playing field; arrangements and adjustment all players game time; layout of venues and maintain order; statistical and save the game data.
Organization department	Vice-minister	1-2	
	Manager	Some	
Propaganda department	Minister	1	Mainly responsible for publicity of the activities, internal members and association of communication and event report and schedule of production and post work.
	Vice-minister	1-2	
	Manager	Some	
Liaison department	Minister	1	The school sports sponsorship arrangements related activities is mainly responsible for the association of small internal activities and the organization of the Basketball Association.
	Vice-minister	1-2	
	Manager	Some	
Technical department	Minister	1	In the later work is mainly responsible for the referee before the game and sports competition rules and guidance; the formulation and interpretation of the game rules; arrangement referee; training of sports referee; arrange and record the data match game.
	Vice-minister	1-2	
	Manager	Some	
Secretary	Minister	1	Mainly responsible for the registration and management of membership information, organized and recorded system of conference, the drafting and revision of the relevant system; coordinating the work of various departments and activity records and data and budget approval.
	Vice-minister	1-2	
	Manager	Some	
Ministry of construction network	Minister	1	To be responsible for the media communication of the association and the members of the society, and to set up a temporary working group when necessary, to be responsible for a certain work.
	Vice-minister	1-2	
	Manager	Some	

2.2 Personnel Appointment and Selection

The chairman of the current session of the nomination by the previous president, and finally by the full assembly to attend the vote on behalf of 2/3; Minister nominated by the president, the General Assembly attended the vote on behalf of more than 2/3;

The basketball activities completed by each department of coordination and cooperation, the association will award month outstanding manager at the end of the month, at the end of each semester, school should award outstanding director, outstanding cadres and sports outstanding contribution award, given honorary certificate and issued by the Federation of student groups.

2.3 Organizational System

The financial system: the funding sources of association mainly from social sponsorship and funding and membership to the Communist Youth league. Secretariat is responsible for internal finance, the required funds were planned by the Secretary Ministry, submitted to the presidium for approval, valid invoice (or receipt)

reimbursement. The account should be open, transparent. All members can supervise and put forward the problem.

The meeting system: at the end of each semester, a plenary meeting was convene. All members shall not be absent without special reasons. The meeting mainly on the annual work summary and preliminary school work plan, the selection of outstanding sports director, outstanding cadres and outstanding contribution award. In term midway, the major event of things be decided by the presidium to discuss all members. All members shall not be absent without special reasons. Every month, cadres meeting should be held at least once, all the cadres shall not be absent without special reasons. The meeting mainly on the preparatory work is summarized, the next phase of the work plan, and the selection of the monthly outstanding director; each department according to the needs of the work, decide.

The activities carried out by the association should be followed in strict accordance with the relevant provisions and procedures of the school. Prior to submit a detailed plan and declare, after approval can be carried out, after the summary record.

3. The Function Present Situation and Analysis of Qingdao University of Science and Technology Girl's Athletic Association

3.1 Exercise Strong Communication Skills

The Girl's Athletic Association as an organization of many members, the interior is equal, relaxed, just like a small society, between the member to more frequent exchanges, training of members of the communication ability of the more fully.

The Girl's Athletic Association can make use of the advantages of their own student associations, to break the bottleneck of the exchange of classes, and actively create opportunities for contact their members and social, open up the channels of communication with the community.

The Girl's Athletic Association can help members from school to society and achieve the purpose of serving the society, to promote its members to make full use of the broad stage of society and rich resources, to strengthen the training of occupation ability, enhance the members of the association of social adaptability and communication skills.

3.2 Setting Up A Good Team Spirit

The internal members of the Girl's Athletic Association is an equal relationship. In the activities, they can speak freely, to exchange views on equality, publicly clarify their own point of view, has a strong democratic atmosphere. All of this helps to cultivate students' democratic consciousness. In carrying out activities, from the planning of the activities to the funds, equipment, venues and other specific issues, we need to work together to cultivate the spirit of fair competition and cooperation with others (Wang, & Shen, 1999).

3.3 Active Campus Life

Today, the way of our university campus cultural activities is still relatively simple, such as college organizations, student organizations, or the organization of associations. Colleges and student union organize large-scale activities have a certain degree of time limit, generally an annual. Therefore, or the main role is small association in most of the time. The Girl's Athletic Association activity has great flexibility, it can be a small range of activity game, also can be a series of activities for a long time, which greatly enrich the students' extracurricular cultural life, with distinctive characteristics, strong pertinence, rich and colorful activities to attract the majority of students to participate in. It can be seen that the activities of the Girl's Athletic Association are active in the daily life of students, and play an important role in the construction of campus culture. In the activities, they not only exercise their own, but also to their own value has been reflected.

3.4 Exercise Effect

The Girl's Athletic Association organized the students with the common interests and hobbies. This needs that students spontaneously organized together, is not confined to the teaching plan and syllabus, a variety of forms, rich and colorful content, provides the possibility for the comprehensive development of talent cultivation. It reflects that the value orientation of College Students' sports has been transformed into entertainment, communication, competition and other aspects, has developed to a higher level. The amateur sports activities of college students show the characteristics of diversity, integrity, initiative and instability (Jiang, & Shen, 1995).

3.5 Extension of Classroom Teaching

Under the guidance of the teachers and the students, the physical teachers teach the physical knowledge,

technology and skills according to the educational plan and the physical education syllabus. Because the sports classroom teaching is the form that dozens of different personality students together. It is a great limitation that the principle of teaching students in accordance of their aptitude (Dong, 2004). It is very unfavorable for discovering and cultivating sports talents. Activities planned to carry out by the Girl's Athletic Association can consolidate the classroom teaching skills, expand and deepen the content of classroom teaching, more conducive to broaden their horizons, individualized.

3.6 Develop the Habit of Exercising.

College students are in the critical period of growth and development. Plasticity of the body is very strong. Many parents and students have realized that health is very important. Parents should encourage their children to participate in sports activities. Students actively participate in Sports Association. So the Girl's Athletic Association is a very good platform. Making a good foundation of health in the Girl's Athletic Association activities and school sports teaching, it is not only need to complete their studies and happy life of the students at the stage, but also their lifelong health needs (Chen, 2006). But foundation of personal physical health in the age of the students is not once and for all. So good habits formed in the Girl's Athletic Association activities of physical exercise and health awareness and ability, will benefit students for life.

4. Problem and Actuality of Qingdao University of Science and Technology Girl's Athletic Association

4.1 The Decrease of the Registrations

Qingdao University of Science and Technology Girl's Athletic Association has been established for 12 years. It could be said to be a qualified students interested in the community. In accordance with the normal state of development, a interest association team should be quite strong in the face of perfect system and facilities, after the development of 12 years. But we have seen the opposite results from the years of data. Since the association was founded in 2005, except the number of members were added to 74 people in 2007, the numbers of registers are less than 35, and even drop to 11 people in the year of 2009. So it is not difficult to rule out that the number of members in 2007 reached a peak because the membership fee was reduced from 15 to 10.

4.2 Organizational Construction Sector Confusion

From the data over the years, we can also see that the organization does not follow a certain organizational structure, the composition of the Department has been changing. At the beginning of the association, in addition to the president and vice president, under the various departments were set up, such as of the Secretariat, the Propaganda Department, liaison department, technical department. It is not difficult to see that the association made efforts to standardization, scale and systematic management of association development at the beginning. Data of 2013 shows that the association was a total of 28 people, in addition to the president, other departments has been canceled. We can also see that the Association changed its name from the Girl's Athletic Association to the Sports Association in 2012. According to various performance, we can say that this association in the process of development is to explore a more suitable road for them to survive in the competition and the high school association, and in the organized construction and the tendency to association object what they think is beneficial to the association to adjust. But we can also say that the association in the development of the road has gradually deviated from the founder's original intention, if the Girl's is not deleted in the name of Athletic Association. It would be not the so-called "girl's sport enthusiasts association, the majority of women's sports enthusiasts to exchange the bridge and the link and the association for the expansion of the object is to create a deviation from the original association (Cao, 2008). Perhaps like the current sports association president Zhihui Liu stressed the "freedom", the sports association itself is for the majority of people who love sports to provide a platform for communication, do not need so many departments. People in the association are straightforward style, do not want to do something deliberately have some restrictions on the mechanism. It can be said that an association showed different trend under different people "rule", but no matter what kind division of each party in some way. We can not say that each argument, or the system has the absolute right and wrong. But the long-term survive, an association must have the core it is the spirit of this association. One principle runs by this, it is fresh and vigorous.

4.3 Association Operating Funds Tight

Zhihui Liu, President of the Girl's Athletic Association, said that there was a problem: the association did not ball. As a sports association, their sports could not get good supply and security. She said that although we received dues, but the money was not in our hands. We often played the game, when the ball was broken, we needed to buy, so we would apply for funds, hoping to set aside some of the cost to buy the ball. But it was not approval without reason. The association did not have the ball so we were playing with their own, and now can

only be so. Association has not the source of funds and equipment, but some ways are not so effective in the actual operation of the process. But we can also see that facing the financial problems, the association did not attempt to seek sponsorship and other way. When finding that "system" was not affect no longer, it was sitting still waiting for death that no action was carried out in a way.

Everything is not going smoothly, roughly. Perhaps, each association has presentation of prosperous, but also has aching difficulties behind. Problems continuously exposed Association in the development process of association, let us love dearly and introspection (Ma, Gao, Zhou, & et al., 2006). Survival of association is very simple and also very difficult. In fact, the vitality of society depends more on the attitude of the core leadership and positive active mind. Their own piece of heaven and earth were developed t in a bandage, the essence of the problem can be seen out of the complained layers, finding a way to solve the problem (Sun, 2007). So the association is not only fanciers, interest associations also need good community operators and managers.

5. The Future Development Strategy of Qingdao University of Science and Technology Girl's Athletic Association

5.1 Strengthen and Perfect the Organization System Construction

Although the Girl's Athletic Association activities determined by their plan, but they accept the guidance of the school league and student. Various sports activities are carried out on purposeful and meaningful. The association positive guided the establishment and improving and perfect the management system according to the actual situation. The more activities, associations are more active. They will attract a mass of the students, the team is relatively large. Therefore, it is an important measure to promote the development of school physical education which sets up the management system and long-term development plan (Skocpol, 1979). No can be accomplished without norms or standards. Association does not have strict rules and regulations, members do not have the strict discipline, not only to make the members of the discipline lazy, but also to bring chaos to the entire association and helping the formation of bad wind. Therefore, it is necessary to improve the management system of the association, optimize the management mode, so that the association management standardization, regular activities, rapid development. To make the Girl's Athletic Association of Qingdao University of Science and Technology develop in a healthy and orderly way (Salamon, 1999).

5.2 Association of Rich and Colorful Activities, Increase Attraction

The Girl's Athletic Association need to elaborate organization activities, give full consideration to all the members. In the activities of the content and form, to the novel, warm, comprehensive care and relaxation, to maximize the increase of association of appeal. Not only making every member of the association loves the activities, and feels the warmth of the collective in the process, but also let them feel the full value of their own, and allow more sports enthusiasts to participate in society, to change less situation of the members.

5.3 Activity Funds

The shortage of funds is still the one of the important factors which restrict the Girl's Athletic Association activities. Although each member has to pay a portion of dues, but this is far from enough daily activities and equipment purchase. So it is necessary to seek corporate sponsorship. In order to get corporate sponsorship, we must try to expand the scale of the activities of the association to improve the advertising effect. According to the actual situation of the Girl's Athletic Association summarizes the activities, develops a quarter, semester or year activity plan, reasonable arrangements for the activities of the time and place, carefully designs activities. The activities of the organization before the publicity work, to create a momentum, expand the time span and the effect of advertising, attracting business sponsorship. At the same time, it can also be appropriate to increase the amount of membership dues from members to ensure the normal operation of the association. Each member of the membership dues are also used in the members of their own body, not only to meet their own interests, but also exercise the body, so the appropriate increase in the amount of membership dues can be understood and realized.

5.4 To Hire Teachers and Leaders

The Girl's Athletic Association should choose those students that have a sense of responsibility, capacity of management and a greater interest to the Association as the leaders of the association. Meanwhile, hiring professional guidance teachers not only make the association more professional and effective but also instruct member's sports professionally. The Girl's Athletic Association is managed by the school committee as an independent organization. The school committee should strengthen the management of the association, which can improve the positivity of the teachers and the leaders to promote the Girl's Athletic Association for developing more healthily and orderly by some ways such as making policy of rewards and punishments,

rewarding teachers and leaders.

5.5 To Increase the Activities of the Association and Enrich Its Activities

The Girl's Athletic Association should try to increase the number of activities and time to make members participate in each other by spending fully spare time and holidays. The activities of the association are not limited to the training and competition of the project but engaging in a number of student fraternities or hiring experts for carrying out relevant knowledge seminars to increase communication and communication between the various associations. These activities can further enhance the capacity of members to promote the association to reach a higher level.

5.6 To Change the Content of Activities for Turning Entertainment into A Major Activity

Nowadays, like the traditional student sports association the content of the Girl's Athletic Association's activities is simple and its mode of operation has been fettered. Consequently, Reforming the teaching and training content and improving the fun of sports are essential to reduce the difficulty and increase the aesthetic feeling for not only conforming to the trend of the times but also meet the desire of college students to attract more female students. At the same time, paying attention to many factors including fitness knowledge, methods, projects can enable the association to develop more deeper than those traditional student sports association.

6. Conclusion

The Girl's Athletic Association provides a broad space for the students to make the campus culture become full of youthful spirit. It can not only actively encourage and guide students to carry out the activities of the association, but also promote the all-round development of students, which is an organic part of the campus. The Girl's Athletic Association is a product of the development of modern education and an important part of physical education in universities. Meanwhile, it plays an important role in strengthening students' health and cultivating students' health consciousness.

We should attach great importance to the organization of the association and the role of Girl's Athletic Association to take a comprehensive and healthy development for the association. Moreover, we also should adapt its characteristics and current situation to strengthen the support, management and guidance of the association.

The saying that "The interest is the best teacher" means the interest can lead a person to love something crazily and guide him to get close to those people who have the same interests. Therefore, we can say that as for the association, people who can gather in this place have the same hear. What can we do is how to let these people strength together and renew vigor to produce the maximum impact with efforts of all people.

References

- Cao, Y. (2008). The Present Situation and Countermeasures of the Development of College Sports Associations in Jiangsu. *Journal of Capital Institute of Physical Education*, (8), 96-100.
- Chen, W. D. (2006). The Influence of the Sports Association on the Lifelong Sports Consciousness and Ability Cultivation of College Students. *Journal of Minxi Vocational and Technical College*, (3), 93-95.
- Dong, X. Q. (2004). On the Influence of the Activities of Physical Education Fans 'Associations on Universities' Physical Education Teaching. *Sport Science and Technology*, (2), 75-76.
- Fan, L. R., Gu, M. R., & Wang, H. Z. (2000) A Nationwide Survey on Students 'Physical Activities after School. *China Sport Science*, 20(2), 7-11.
- Huang, Y. L. (2003) Discussion on Sports Associations in China. *Beijing: Beijing Sport University*.
- Jiang, Q. Y., & Shen, M. D. (1995). The Basic Characteristics of the University Community Activities and Working Methods. *Journal of Hubei Sports Science*, (4), 81-83.
- Ma, X. D., Gao, Q. J., Zhou, Y., & et al. (2006). Investigation Research on the Function and Significance of Sport Corporation in Universities and Colleges. *Journal of Beijing Sport University*, 29(2), 227-228.
- Salamon, E. (1999). The Rise of the Third Sector. *Foreign Affairs*.
- Skocpol, T. (1979). *State and Social Revolution*. Cambridge University Press.
- Sun, X. B. (2007) On the Influence of College Sports Association on School Physical Education. *Sports Teachers*, (5), 29-40.
- Wang, C. Y., & Shen, J. H. (1999). Reflections on the Development of Extracurricular Sports Activities in China. *Journal of Shanghai University of Sport*, (4), 61-64.

Xu, Z. H. (2003). A Preliminary Study on the Materialization of Sports Associations. Guangzhou: Guangdong Higher Education Press, 14-15.

Zuo, R. Y., & Xie, J. (2003). The Role of University Sports Social Organizations. *China School Physical Education*, (5), 52-53.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Evidence-Based Research on Barriers and Physical Limitations in Hospital Public Zones Regarding the Universal Design Approach

Charanya Phaholthep¹, Antika Sawadsri¹ & Thirawut Bunyasakseri²

¹ Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang (KMITL), Bangkok, Thailand

² Faculty of Architecture, Naresuan University, Phitsanulok, Thailand.

Correspondence: Charanya Phaholthep, Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang (KMITL), Lat Krabang, Bangkok 10520, Thailand. Tel: 668-8282-9037. E-mail: yummer308@hotmail.com

Received: February 6, 2017

Accepted: February 27, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p133

URL: <https://doi.org/10.5539/ass.v13n4p133>

Abstract

The hospital is a public building which has the primary duty to provide services to everyone. So far, it is necessary to take into consideration the principle of Universal Design (UD) in responding to the behavior of users, particularly, persons with disabilities. This research focused on 2 main issues, (1) the physical features of the public areas for measurement and collection regarding to the style, size and location of facilities, and whether they meet the requirement and/or appropriate for people with disabilities, and (2) behavior of users with disabilities in accessing spaces and service facilities in the hospital public zones, focusing on the involvement between activities, behaviors and problems which occur. This research used empirical method to assess and evaluate the physical features by the process of Post Occupancy Evaluation, (POE), using 2 evaluation methods, 1) survey/observation (Cognitive walkthrough) and 2) scenario access audit methods. In detail, the survey/observation focused on the obstacles within a physical environment that affect space and service activities regarding people with different types of disabilities. Identifying the obstructions in public functions and health care facilities was implemented by a group of design specialists. On the other hand, the scenario access audit process was operated by determining the level of accessibility and the real patient flow of patients with disabilities on-sites and spaces in public zones. Therefore, this research speculated on all problems and came up with the design guidelines to improve the physical features of public zones in responding to the usability of the service facilities under the UD approach.

Keywords: Evidence-based research, physical feature, users' behavior, disabilities, Universal Design, Hospital

1. Introduction

The 21st Century has ushered in a new paradigm for universal design which no longer merely has singular or practical uses, such as catering to people with disabilities, but offers much beyond that, considering such concepts as autonomy, self-organization, ecology, sustainability, adaptation, and potential for continuous improvement. These concepts apply not only to social service facilities but to all types of operations related to design, including products, interiors, architecture, urban setting, traffic, even communication and information technologies (Preiser & Ostroff, 2001). Karen Kroll said in 2005 that "the impact of buildings on people came not from an architect or a researcher studying workplace performance, but from a politician" (Kroll, 2005), suggesting the importance of considering the human community as a whole when conceptualizing design. Eventually, the Seven Principles of Universal Design were established by the Center for Universal Design in 1997, which offered a complete and thorough paradigm for how to benefit humanity through design. And if there is any one facility type that this new paradigm should be applied to, it is healthcare facilities (Preiser, n.d.).

Universal Design (UD) is a design concept intending to provide benefits equally for everyone and inclusively for all physical limitations, genders, ages and so on. Although the concept of UD was influenced considerably by the modern family and modern social structure, those with special needs were often at the forefront of the designers' minds. But, the idea of UD is not generated from a feeling of pity or sympathy; the non-dependent person is also considered, and the consideration for how "normal" people go about their everyday lives is a powerful influence on the design trend, particularly housing design. Indeed, it encompasses a variety of lifestyles and living trends in modern society, so in essence, the UD concept is fundamentally based on human usability rather than

accessibility, usable in all aspects of design, but also considering the prevention of problems that may arise for anyone, with or without special needs, and allowing for later modifications if any problems should occur later.

In today's society, the role of a healthcare organization does not just mean only the quality of hospital treatment, but it also must consider people's health rights and security. People must have a Right to Health (an economic, social and cultural right). Matters such as a self-determination, access to information, privacy, solidarity, doctors-patient relations, and relevant person-doctor-patient relations (WHO, 2008). Accordingly, the basic rights and social needs must be addressed, such as ease-of-access, and to give priority to all people inclusively (Setola, Borgianni, Martinez, & Tobari, 2013). Right to health and quality of life are the core of human and social rights, and the foundation for the structure of a good society should be based on that. Therefore, social links – such as family, school, working environment, social and personal life environment – in which and through everybody becomes a person and is able to express him/herself as such (Longo, 2012), should be considered when designing a building; how buildings are structured is an integral part of this foundation.

The rational process of architectural design begins with these questions – 1) what is the main purpose and what will be the main uses and functions of this building, and, 2) who is this building going to be designed for? Therefore, the usability of space is essential in design, based on the user's activities, needs and behavior (Sahachaiseri, 2012).

A hospital is a type of building that consists of a wide variety of utilities, making its design very complicated. It is created to fulfill public requirement (Murphy, 2012). Thus, its essential nature means that good design is very important. To complicate matters, the planning of healthcare facilities, whether for a small or large complex, always requires more elaborations and sensibilities because the facilities within the hospital are continuously in need of change and upgrade as technology advances and the world changes, in general. Users of these facilities often have the right to make a decision where to go for healthcare, and they may choose the most easily accessible and most comfortable environment (Preiser, Verderber, & Battisto, 2009). The positive effects of physical environment design indeed influences well-being, promotes healing, and even plays a role in relieving patient pain and stress and reducing medical errors, infections and falls (Preiser et al., 2009). Recently in various studies, very clear results showed the important role of design and architecture in therapy treatment and well-being (Ulrich et al., 2008). There is increasing awareness of this fact, however, those who wield administrative power thus far are sometimes reluctant to make important changes. Thus, some improvements in healthcare environment design are still not being developed. The quality of treatment alone is being measured and improved with standard criteria for assessment and evaluation, but important extra factors are often ignored.

The researcher is contributing to the project named “Evidence-Based Research on Barriers and Physical Limitations in Public Zones Regarding the Universal Design Approach: The Case of Naresuan University (NU) Hospital”, which consists of a process of empirical study on structural features and environmental design, mainly focusing on the level of accessibility of people with disabilities regarding the service functions and facilities within the public zone of the hospital.

2. The Research Objectives

1. Studying the physical environments and function accessibilities of the hospital's public areas for people with disabilities.
2. Analyzing the obstacles which cause a level of inaccessibility in the hospital's public areas for people with disabilities.
3. Making design guidelines and suggestions for the design process in building design and overall environment design in the hospital's public areas concerning people with disabilities.

3. The Methods

This article focused on the behavioral and the functional accessibility issues of people with disabilities, considering in the public zones of NU Hospital. The operation processes are described as follows:

3.1 Step 1 - It is divided into two parts: the first part was to identify the concept of UD theory as well as criteria standards as defined for the basic facilities for disabled persons in accordance with the rules of ‘The ministerial regulations regarding facilities for the disabled and elderly of Thailand 2005’ (Department of Empowerment of Persons with Disabilities, 2012) ; the second part was to study and review building and environment design theories, including the way-showing and wayfinding systems, environment design for directional guidance, the design process for the healthcare facility to meet behavioral needs and provide satisfaction to patients and occupiers, and the techniques and processes of building environment evaluation so as to provide appropriate physical facilities with an emphasis on the issues related to people with disabilities.

3.2 Step 2 - A preliminary survey about the flow of access to service functions and physical features of the public area which consists of the parking lots, the main entrance to the building, the triage counter, the public relations (PR) counter, the out-patient department (OPD), the emergency room (ER), the exam diagnostic rooms, the cashier counters, the pharmacy, the elevators and elevator halls, the public corridors and halls, the bathrooms, etcetera. This study determined details and limitations of the location and size of these particular spaces, and addressed the flow of activities and how service functions are affected.

3.3 Step 3 - Applying the information from the survey to determine the problems regarding the limitation of mobility in general, and problems for the hearing and visually impaired. This experimental study considered problems in building design for the deaf, blind, low-vision, wheelchair-bound, crippled, and those in need of canes and walkers.

3.4 Step 4 - From the results of Step 3, the researcher created tools and methods for implementation and evaluation regarding the physical environment, both inside and outside the hospital. The operation began with a group of people with disabilities participating in and completing simulation tasks in settings which represented the regular patient flow settings of NU Hospital. This process was used to determine spaces and facilities that did not meet the requirements of people with physical disability, and how exactly these spaces and facilities failed. All of the corrected results were recoded, identified, analyzed and then classified, determining the problems group by group, and isolating the problems by the level of frequency. This was done mathematically with the basic statistics formula (T-Test), which adduced a percentage system.

3.5 Step 5 - From the scenario access audit reports in Step 4, the researcher analyzed and summarized the obstacles caused by the physical limitations of disabilities regarding access to the public facilities of hospital. In addition, the summary of obstacles was reviewed in cooperation with interior design theories. Finally, design guidelines were suggested, and how they can be implemented, so that people with disabilities can best utilize hospital public zones.

4. The Research Results

The researcher summarized and divided the research results into 2 issues: 1) a preliminary survey regarding the physical features in the hospital public areas as they pertain to how and how well they function, and, 2) an access audit and evaluation process resulting from the participation of people with different types of disabilities in simulation tasks at Naresuan Hospital public areas in situ. Details are as follows:

4.1 Summary of results from a preliminary survey of the hospital public areas; regarding how well they function, following the formal process of Post Occupancy Evaluation (POE) (Preiser et al., 1988). This method focused on assessing and evaluating physical functions of hospital public areas as they pertain to people with disabilities. The results highlighted the problems and obstacles of physical environments regarding spaces, activities and service facilities for people with disabilities. Areas looked into included a gamut of navigation paths, such as hospital corridors, and how well they connect different areas of the hospital for people with disabilities, and how they were associated with each other in general within the realm of people with disabilities. This is described as follows:

4.1.1 The exploration map illustrates the walking and vehicle routes approaching the entrance to the hospital building.

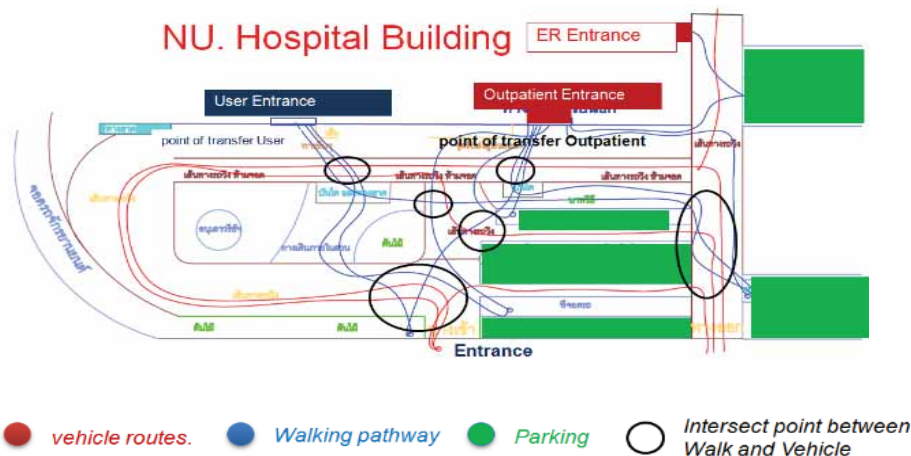


Figure 1. The exploration map of the vehicle ways and walkways according to the actual situation of NU Hospital

4.1.2 The location map consists of as follows: Triage counter, Public Relations counter, National Health Security office, Outpatient Department (various specialists), Exam Diagnostic rooms (X-Ray, Lab), ER, Cashier, Pharmacy.

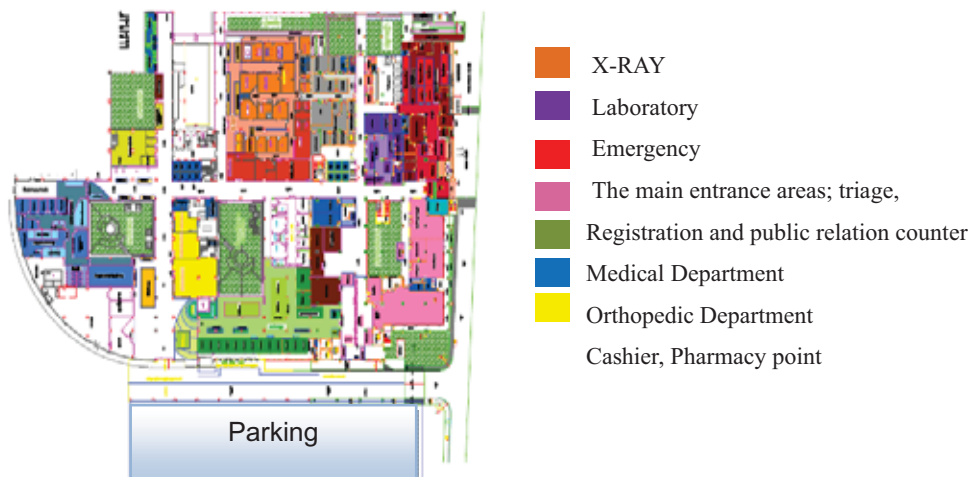


Figure 2. The location map featuring each service facility according to the actual situation of the 1st floor at NU Hospital

4.1.3 Exploration of various facilities, specifically for people with disabilities, with paying attention to signage, ramps, elevators, and furnitures such as waiting-room chairs, counters, and etcetera.



Figure 3. Images of facilities at NU Hospital - a service counter, an indoor ramp, and a parking space for disabled people

The survey found that obstructive crowd density occurred in various critical areas, both inside and outside the hospital, such as the car parking areas, passenger drop-off areas, the OPD main entrance point, the triage counter, the public relations/registration counter, the entrance to the medical department, the entrance hall and corridor within the blood test laboratory, the orthopedic department and several other departments, the walkways in front of cashier, and the pharmacy. The high number of people caused a great obstruction to flow routes at various critical points. This affected the flow of patient trolleys, wheelchairs and persons with disabilities who were on foot, and impeded accessing and finding the way to other service facilities and to other areas of the hospital. The main problems at NU Hospital are finding destinations with relative ease, and obstructions caused by the density of people along various pathways and at service facilities throughout the hospital.

4.2 *Summarizing the results from the scenario access audit process* (Phaholthep, Sawadsri, & Skates, 2016). This research relied on empirical study, namely, the participation of a number of people with disabilities experiencing real situations with service facilities within NU Hospital, and experiencing real situations within the hospital in general. Specifically, this study intends to identify, investigate, and diagnose the sources of obstruction problems which affect activities, and how people with an assortment of disabilities are affected in the public areas of NU Hospital. Physical features, locations, spaces, furnishing styles, building environments, the signage system, and the connections between each function and each area within the hospital, were looked into. The people with different types of disabilities who participate this access audit process comprised 5 males and 6 females. One of them is elderly. Of the 11 participants; one is deaf, four have visual limitations - two are completely blind and the other two are visually impaired - four are wheelchair user, one is crippled, and the last one is congenitally armless.

Each participant took part in simulated situations, accessing various service functions within the hospital. Each of them was assigned different tasks and required to perform an activity individually, imagining that they were a

real outpatient coming to the hospital and seeking medical treatment. Participants performed these tasks individually due to the individual nature of their disability, and the unique way they assessed the hospital conditions, such as appropriate and inappropriate space, environment, service facilities, and any obstructions or other impediments that may affect their specific disability. This process was employed not only to seek out the problems with building design and service functions but also to find out what's good about building design and service functions as they were applied to people with disabilities. These operations were performed in the following areas by each participant; the car parking area, the main entrance, the triage counter, the registration and public relations counter, the medical department, the emergency department, the exam diagnosis room, the X-ray room and laboratory, the cashier counter, the pharmacy area, the connective corridors, the halls inside the building, and other facilities such as elevators and bathrooms. It was vital to keep the scenario as close to the reality as possible. Each participant being a part of scenario access audit was observed and recorded on video camera by the camera-person from a certain distance without any assistance unless it needed. The camera-person always kept a certain distance from participants, and does not assist them in their tasks unless assistance needed. The results can be summarized as follows:

4.2.1 Car parking area and the building entrance: Problems found

- The signage showing where to park is not clear.
- There is no sign or signal leading in the parking lot for people with disabilities to guide them to disable parking spaces.
- There is no footpath or an obvious non-vehicle passageway, making it dangerous for people as they have to share the passageway with vehicles.

4.2.2 Hospital main entrance: Problems found

- Temporary drop-off at the building entrances has no signage (or signage that is not clear enough)
- The distance between the drop-off point – where people get out of the vehicle - and flowing vehicle traffic, is very slight, which can cause serious harm if someone to someone getting out of a vehicle.
- The pathway around the building entrances, and the Outpatient Department (OPD) main entrance, has no cues (such as tactile paving) to help navigate the visually handicapped, and there are objects, such as chairs, that obstruct the passageways. There are other obstructions as well in the general building-entrance area. Especially for the visually impaired, there is a lack of cues to guide people to where they need to go.
- Intersections and the main entrance doors should have a warning sign, both visually and auditory, and warning devices should be installed at other important points for blind and visually-impaired persons.
- Walking passages into the building were often blocked by wheelchairs or patient trolleys, causing difficulty in accessing the entrance.
- The OPD signage was installed at a position that is not perceptible to the eye.

4.2.3 Triage Counter for new patients: Problems found

- The location of the triage counter is located right next to the entrance door, which is good. This makes access easier for persons with disabilities. However, there is always a congestion in this area during peak time of the morning. There is often a great density of people waiting in this area. Consequently, this can cause a difficulty for everyone.
- not only for people with disabilities, but for able-bodied people as well - regarding smooth access to the building, then figuring out one's position or situation relative to one's surroundings, and even can affect smooth navigation to one's destination within the hospital.
- The sign or nameplate of the triage counter is located only inside the building. It is difficult or even impossible to see from the outside. For people with disabilities such as the wheelchair bound or the visually impaired, especially when crowd density occurs, the triage counter area was almost inaccessible.
- Although counter height level is appropriate for both able-bodied people and people with disabilities, but there is no space underneath, needed for easy access for those who approach the counter with wheelchair. Thus, a wheelchair user who wishes to use the counter for writing or other functions experienced some difficulties.

4.2.4 Public Relations area: Problems found

- The observation and simulation exercises found a density of crowd at this area, especially in the morning. Regular queues of people at the PR counter caused congestion as the queue extended across the hall and

obstructed the main passage to various important hospital departments. This congestion creates an obstruction to all users, especially for wheelchairs, patient trolleys, and people with disabilities. Because of the congestion in this area, many people moving through the area cut across the queue, causing a chaotic situation, and even jumping the queue cutting in front of anyone, even people with disabilities. This situation become even worse for the visually impaired or the blind, who cannot realize their surroundings well or even at all, mainly because of the fore mentioned obstructions.

- The public relations area has no audio signal to indicate the position of this service facility.
- The counter is too high, which causes a difficulty for wheelchair users to communicate with staff.
- The waiting area (which includes benches and chairs) impinges on the main passage to the other departments. Consequently, the visually impaired as well as wheelchair users have great difficulty passing through, or attempting to access other services.

4.2.5 Focusing on hospital department issues, the researcher selected only the departments that experiences the highest density of crowd as well as the highest level of problems in service facilities. These departments included the Medical and the orthopedic departments.

Medical department: Problems found

- As the department entrance is located very close to the PR and the triage counter, the crowd of people waiting in queue for registration, especially at the peak period, always overflows and blocks the front of the entrance. Thus, the wheelchair bound and the blind often always find the difficulty to see or enter this department.
- Registration and primary physical examination (Wellness check) counters inside the department are located so close to the entrance, and impinges on the inner walkway. During peak periods crowd congestion frequently obstructs the passages within this department.
- Around the area where people wait for their appointment cards, the circulation of pedestrians congests the area between the waiting seats and the appointment counter, thus it is difficult for the wheelchair bound and the blind to access this function easily.
- The signs or nameplates which guide people to the service facility points within this department are not clear. The fonts on several of them are too small, and some are located at a level too low to view sitting in a chair or a wheelchair. They are often blocked because of the combined density of crowds and equipment.
- There are no signs, symbols, audio signals or tactical tiles to guide the way to each service facility.
- The public address (PA) system is often inaudible due to noise, which is a problem during peak periods. This poses a problem especially for the hearing impaired, but sometimes PA announcements can't even be understand by those without any hearing difficulties. As a visual signboard is not present in this department, people are reliant on hearing messages given through the loudspeakers.
- Although the wide corridor of this department is good for wheelchairs, because it lacks tactile paving (Braille blocks) its wideness makes it difficult to estimate the direction and surroundings for the visually impaired or the blind.

Department of Orthopedics: Problems found

- There is no tactile paving (Braille blocks) nor audio signaling to help the visually impaired and the blind navigate, and to help them be aware of their environment.
- There is often a high density of patients congested in front of the department entrance, waiting for their treatment. Thus, the visually impaired and the blind find it difficult to get to the registration counter because the entrance is impeded.
- There is no audio signal or other specific equipment to help blind people get to the registration counter.
- Congestion often occurs at the entrance hall, causing difficulty for people with disabilities to pass through the entrance to the Department of Orthopedics, especially the wheelchair bound and the visually impaired.
- The positioning and location of the furniture within this department is not ideal. For example, the wellness checks counter is located so close to the registration counter that patient/nurse interaction has to be done in a crowded space, in the same area where people are registering. It can be chaotic. Further, the registration counter and waiting benches are located too close to each other. This causes the walkway to the treatment room to be too narrow. As orthopedic patients often come to this department using walkers or canes, or are in wheelchairs, the narrow walkway, the overlapping space that both nurses and patients plus registering patients use, and the overall

density of crowds, cause difficulty for orthopedic patients to access the facilities within this department.

- The height and design of registration and appointment counter is obviously too high and unsuitable design for a person in wheelchair to communicate with the staff or use the countertop in writing purposes.

4.2.6 Out Patient Department (OPD) Cashier: Problems found

- Most participants are able to access to OPD cashier easily because it is located at the main corridor of this hospital, making it clearly visible.

- Wheelchair-bound persons require more effort to find the cashier because the section nameplate is not installed at the appropriate location for them to see it clearly.

- There are no cues to navigate the blind to the OPD cashier, thus blind persons cannot find this section themselves. (In the simulation exercise, staff have to lead them to the OPD cashier.)

- The height of the payment window is too high for wheelchair-bound persons, causing communication difficulty for participant and cashier staff.

- During the peak period, so many people stand in queue to access this service that the queue goes across the main corridor, where many people are passing through. There is such chaos and confusion sometimes that at times people with disabilities are overtaken in the queue.

- There are no symbols or audio signals for the hearing impaired or deaf.

4.2.7 OPD Pharmacy - two activities are performed at this stage: 1) submitting the payment slip, and then, 2) receiving the medicine: Problems found.

- Most of the participants are unable to find the OPD pharmacy because there is no clear sign or nameplate to present the location of this facility.

- This facility is located along a main passageway, where a lot of people pass through for various purposes. During the peak period, the queue goes across the passageway, creating inconvenience and obstruction for both those in queue and those passing through on the passageway. This situation frequently causes the blind and wheelchair bound to be overtaken in queues, and in general makes it difficult for them to reach the pharmacy counter.

- The pharmacy counters used for submitting payment and receiving medications are too high for wheelchair-bound persons. It is inconvenient for them when trying to communicate with the pharmacist so as to receive their medication.

- Since the main passageway impinges on the waiting area and on the pharmacy counter, the wheelchair bound, the blind, and in fact everyone, are frequently obstructed by the crowds of people who walk through this area.

- There should be waiting seats for people with disabilities near the calling area so they can access messages clearly. This is especially applicable for the deaf and elderly who are unable to hear or see from a distance.

4.2.8 Intersections, walkways, corridors and halls on the 1st floor of NU Hospital: Problems found.

- All participants experienced similar problems with patient flow. Since most of service facilities within this hospital are located along the main passageway, the density of crowds impeding the passageway, especially around each department, was a regular problem. In addition, the positioning and location of furniture and equipment sometimes exacerbated the problem of impeded user flow. The said situation really affects people with disabilities the most because of their mobility and physical limitations.

- Chairs or benches at the waiting area of each department are often located across the walkway.

- There is no tactile paving (Braille blocks) or other navigation equipment to help the blind in finding direction.

- In some areas furniture is installed too close to the passageway. For example, at the waiting area of the public relations counter, the corridor is blocked by some chairs. (During the simulation exercises, the blind got confused with direction because of this obstruction.)

- Signage along corridors and by service departments guiding people to find, approach, and enter service departments should be more visible.

- Signage should come at appropriate points while users are enroute from the main entrance to their department destinations.

- Signage located at walkway intersections, though its purpose is to help user flow, actually obstructs user flow at the same time because some people stop and spend time in the middle of the walkways reading the signage.

- The position of some the signage is too high for a wheelchair user to see easily.
- The wider walkway is an advantage for wheelchair movement, but on the other hand, the blind find it difficult to keep direction or estimate their surroundings on wider walkways.

4.2.9 Elevators: Problems found

- The audible signal in the elevators is only in English, thus most of participants cannot access this function fully because they cannot understand English. This is especially problematic for blind users.
- In terms of size, the elevator has enough space for wheelchairs to rotate within the cell. Although the height of control buttons - including the open-close button and the floor buttons - are located within the reach of wheelchair-bound persons, the emergency button is located too high for wheelchair-bound persons to reach.
- Braille letter are available on the control buttons so the blind can use this function conveniently.
- There are no specific signals, especially outside the elevator, to help the blind in finding the location of the elevator-calling button, the elevator doors, and there are no signals to inform the blind which elevator is coming, and when. And, as was recorded from the simulated exercises, the blind cannot get into the elevator before the door automatically closes. Therefore, the staff has to help them to get into the elevator.

4.2.10 Lavatories: Problems found

- Participants are able to access the toilet stalls for the disabled with ease. However, as the toilets for the disabled at NU Hospital are located along a busy passageway, the participants have to be careful of people crossing back and forth while they - particularly the blind and wheelchair bound - are going in and out of the toilet stalls.
- In the toilet stalls for the disabled, the participants have no privacy when using this facility because its wall is made of translucent glass and is attached to the main corridor, which has lot of people passing through.

From the results of the participant's exercises in simulated situations, and the analysis regarding obstructions caused by the physical limitations of the users with disabilities in the public areas of NU Hospital: The most obvious problem is related to the wayfinding system, as the participants often get lost or spend too much time finding their destination. This type of problem may be caused by - the inappropriate signage system, environmental design, and the design of entrances of and approaches to each department, which are not well marked and not visible enough. Furthermore, the overall interior design of the hospital is insufficient for users with disabilities in these ways: Insufficient guiding mechanisms for directing the visually impaired or the blind; the main circulation passage from the car parking area to each department within the hospital is unsafe or not conceived and developed well enough in various aspects; and, some equipment and apparatuses within each department is inaccessible or not conveniently accessible for different types of disabilities. The researcher summarized all the results recorded from the simulated exercises in combination with keeping in mind observations, theories and knowledge of multidisciplinary design, including the building environment design, wayfinding-wayshowing, interior design for healthcare facilities, and the criteria of facilities designed for universal usability. Subsequently, the researcher concluded all the studies and suggested design guidelines to increase the level of convenience, benefit and satisfaction, especially regarding disabled users, and in general to create a more suitable physical environment in public areas of NU Hospital. The simulation features of redesign guidelines are present in the following illustrations.

4.2.11 Hospital Approach: Approaching the hospital towards the inner hospital area.



Figure 4. Current condition



Figure 5. Simulation feature
(Bunyasakseri & Phaholthep, 2014)

Example; The vehicle route that approaches the emergency room (ER) from outside the hospital should have an obvious sign to promote the location of department. High-intensity color painted on the road, plus the addition of a large-size

nameplate, would help to make the ER more accessible and visible. Even saving a few seconds for someone in an emergency situation could save a life, and increased accessibility and visibility may help vehicles get to the ER door a little faster.

4.2.12 Car parking area in front of the hospital entrance



Figure 6. Current condition



Figure 7. Simulation feature
(Bunyasakseri & Phaholthep, 2014)



Example; of the new improved parking lot, with consideration for people with disabilities, and the elderly. Handicapped parking spaces should be located at the nearest parking lot area to the main entrance of the hospital, and each handicapped parking space should provide extra room for wheelchair users, including room enough for them to get in and out of their vehicles (blue label in the picture). In addition, there should be an appropriately-wide ramp to the building entrance, plus safety rails. The material surface should be painted with a vivid color to accommodate the visually impaired.

4.2.13 Passage to the building.



Figure 8. Current condition



Figure 9. Guideline feature simulation
(Bunyasakseri & Phaholthep, 2014)

Example; The illustration shows improvement of space in front of the hospital entrance. This area is also used as a drop-off point. For safety reasons, the design suggestion is to install a safety rail to provide separation between pedestrians and vehicles, and to add a speed bump on the traffic surface. As well, all of the new equipment should be vividly painted with warning colors. In addition, the nameplate and banner of the main entrance could be improved by enlarging its size and adjusting its position, making it easy to be seen from a distance.

4.2.13 (Continue).



Figure 10. Current condition



Figure 11. Guideline feature simulation (Bunyasakseri & Phaholthep, 2014)

Example; These illustrations present a guideline to improving the OPD entrance. Firstly, the footpath should be clearly separated from the road and painted with any vivid color. Secondly, the OPD entrance sign should be enlarged and clearly readable from both the footpath and the road. Thirdly, the cars are colored red in the simulation picture to signify that they should be removed (Figure 11). Allowing vehicles to park in this area may cause congestion and even chaos. Parking here should be forbidden because of a high number of people and vehicles at peak periods.

4.2.14 Service facility points such as Blood Test Lab and OPD Pharmacy.



Figure 12. The current condition of the intersection in front of the entrance to the blood test lab



Figure 13. Guideline feature simulation of the intersection in front of the entrance to the blood test lab (Bunyasakseri & Phaholthep, 2014)

Example; The blood test lab would be improved by introducing a new service counter facing the main corridor for easy access and visibility, and improved service. The counter itself should have two levels to accommodate more types of physical conditions. The instruction board should be enlarged and reinstalled next to the counter. This would make it much easier for people to notice, and to read. The signage at the middle of the intersection should be reordered.



Figure 14. The current condition of the corridor intersection in front of the entrance to the blood test lab



Figure 15. Guideline feature simulation of the corridor intersection in front of the entrance to the blood test lab (Bunyasakseri & Phaholthep, 2014)

Example; The illustration demonstrates that the signage at the corridor intersection, which is supposed to guide people to various service points, should not be put exactly at the middle of the intersection, and should not contain too much information. These misapplications cause blockage on the corridor from people who are constantly stopping at this point to attempt to gather information about where to go next. The signage should be located before the intersection, its font should

be more readable - with sufficient contrast between the lettering and the background - and there should be less with succinct information on the signage. More information could appear later on further signage, after the users have moved along to the next navigation point. These changes would surely result in less crowding and less confusion. Beyond that, to further increase the level of performance by the wayfinding system, color classification may be used to improve visibility and recognition. The signs, banners, nameplates and lobby/facade of each important department could be classified by color all over the hospital, such as an emergency department could be painted red, the specialist departments green, blue signs could signify lavatories, and on and on. An information board could be installed on the building columns support poles around this area, not only for providing information but to serve as a recognizable visibility landmark, from both close up and from far away. Regarding the matter of floor materials, colored tactile paving (Braille blocks) could be applied systematically along the corridors to help the visually impaired or the blind with navigation. These specific-color floor tiles would improve the wayfinding system for general usage as well.

4.2.14 OPD Pharmacy (Continue).



Figure 16. The current condition of the pharmacy located along the main passage



Figure 17. Guideline feature simulation of the pharmacy (Bunyasakseri & Phaholthep, 2014)

Example; The pictures demonstrate how the simulation features can improve the use of space at the pharmacy, especially for making the area more accessible and convenient for people with disabilities. Simulation features include tactile paving along the walkway to the pharmacy counter to help the blind and visually impaired find their way, and more vivid colors at the pharmacy counter and/or a redesign of the department nameplate or banner to facilitate recognition and navigation as well. Moreover, a lower counter for use by persons with certain disabilities, or the elderly, could be introduced, possibly set off to the side in order to prevent congestion.

4.2.15 Corridor halls and intersections within the building



Figure 18. The current condition of the corridor intersection in front of the entrance to the Orthopedic Surgery department



Figure 19. Guideline feature simulation of the corridor intersection in front of the entrance to the Orthopedic Surgery department (Bunyasakseri & Phaholthep, 2014)

Example; The improvement guideline illustration is a simulation of the actual corridor intersection and walkway leading to the entrance to the Orthopedic Surgery department. The signs have been installed in a location that is easily seen from the pathway. The pathway is coming from the elevator hall, so the location of the nameplates should be before or after the intersection. In addition, the signs of each department should use different colors for easy access and recognition, the details about that having been mentioned earlier. Moreover, each department should be vividly decorated to create a noticeable atmosphere, easy to notice and to see even from a distance. Each department and service facility could be marked by different colors, and color coordinated with the signage and guiding floor tiles. This will definitely improve user wayfinding, and provide an overall atmosphere improvement within the hospital. Please keep in mind that there should not be too much information posted, or too many signs and other markers scattered about, as this can cause confusion, and ultimately cause signage and navigation system failure. Moreover, not only the application of specific floor tile materials to increase navigation for all physical abilities is important, but the location and positioning of furniture should also be carefully considered, and set up at the appropriate places. There should be no obstructions to pathways, for example, especially to the blind and visually impaired. Non-public entrances and non-public areas should be very clearly marked to prevent confusion and unwanted visitors.



Figure 20. The current condition of the main corridor and the cashier counter



Figure 21. Guideline feature simulation of the main corridor and the cashier counter (Bunyasakseri & Phaholthep, 2014)

Example; The design guideline simulates the feature of navigated Braille blocks which are installed at the rim of both sides of the pathway to avoid the pedestrian traffic flow in the middle. As the Braille blocks are applied in two colors - green and orange – they not only benefit the blind and visually-impaired, but also help other users in finding their destinations; the orange blocks guide users towards all points from the inner building to the cashier counter, while the blue blocks serves as a navigation tool for users who are going to any point from the building entrance to specific departments inside the hospital building.

4.2.16 Elevator Hall and Corridor



Figure 22. Current condition of the Elevator Hall and Corridor of NU Hospital's new building



Figure 23. Guideline feature simulation of the Elevator Hall and Corridor of NU Hospital's new building (Bunyasakseri & Phaholthep, 2014)

Example; The elevator hall is located along the main corridor. At that location users who have just exited from the elevator regularly have to make a decision about where to go next. As the current design of the elevator hall is quite monotonic, and because the elevators are located in a busy flowing area – especially at peak times – along the main corridor, and in fact contribute to that since people are constantly entering and exiting the elevators, there is often chaos and congestion in the elevator area. The suggestion to reduce the problem from the said causes is to make the elevator area boldly stand out

relative to its surrounding area. This can be done redesigned by applying color to walls and floor tiles, as is shown in Figure 23, to give users an immediate sense of where to go and what to do, and a warning sign in front of the elevators for guiding people with disabilities, and offering immediate and easier noticing, recognition, direction, and access to all others. In addition, paving materials should be a tactile type that can guide the blind and visually impaired to find the elevators easily. Further, on the top of each elevator exterior should be both a visual and audio signal to indicate each elevator's position and direction of travel. This would offer a great improvement in usability not only for people with disabilities, but as well as general users. The best location to install the signage so as to improve the signage system is just opposite the elevators. At this location there would be an improved wayfinding system, information regarding overall directions within each floor of this hospital, and possibly a circulation and configuration floor plan. Moreover, the colors classification system as mentioned earlier should be applied to the signage and wayfinding system. This would create a smoother and faster traffic flow as people would understand what to do and where to go quicker. Finally, please note that these changes should take into account all the potential physical conditions of users. For example, text font, size and color should be readable from wheelchair height, and readable enough to be read by the visually impaired.

5. Discussions

From the research study, the most obvious problem with accessing the facilities within NU Hospital is regarding wayfinding, and the density of crowds is a regular problem as well, sometimes causing the congestion or blocking of passageways, causing difficulty for people with physical disabilities and functional limitation to navigate. An inanimate obstacle in passageways, such as furniture or hospital equipment, was not found to be an issue. To stress, too many people crowding around passageways was found to be a primary problem. If this problem continues unchecked, people with all kinds of disabilities could be affected regarding finding/accessing the facilities, such as the deaf, blind, elderly, and wheelchair-bound. Further, in order to solve or reduce the problems in accessing the service facilities within the public area of this hospital, accordingly, improvements should be considered regarding the disabled parking area. More wheelchair ramps to the building are needed, patient drop-off can be improved as can features and locations of signage, signal and symbols; and, appropriation of service facility points should be addressed, in terms of features and location, for people with disabilities. For instance, the treatment and exam diagnostic departments, pharmacy and other departments should have bold and clear entrance signage and façades featuring department nameplates/symbols, an appropriately designed counter and other furniture, specific floor tiles for visually-impaired people, and navigable features and signage along the corridors/halls and around elevators. Therefore, the researcher has suggested the improvements mentioned above, and created a set of design guidelines featuring simulation illustrations which are based on the literature review from (Preiser et al., 2009). Hopefully, this will bring improvement to NU Hospital. This research study has demonstrated that building designers must take into account the usability for their intended groups of people, taking into account the gamut of physical conditions. The researcher believes that building designs cannot be successful unless the designer carefully considers the complete range of all users. Every user has an effect on every other user, so building designs have to take everyone into account. For example, if passageways are congested by able-bodied people, this suggests that a design change is needed not just keeping in mind the disabled, but keeping everyone in mind.

6. Suggestions

The redesign guideline and suggestions for the public zone of NU Hospital is an improvement guideline created from the process of an empirical study. The observation of this operation has determined that the needs and behaviors of the participants (11 persons with different types of disabilities) are evidentially different from general people. Finally, please note that all the simulation features illustrated in the redesign guideline of this study do not focus on aesthetics, but rather on the improvement of functions relative to the usability of people with disabilities. The aesthetics of healthcare facility design is important, and definitely requires further study.

7. Acknowledgment

This research was supported by King Mongkut's Institute of Technology Ladkrabang (KMITL) and partially supported by Naresuan University. I am thankful to Dr. Henry Skates who provided expertise that greatly assisted this project. I am also grateful to Asst. Prof. Thirayu Jumsai na Ayudhya and Mr Richard Michael Glover for approval of revised English.

References

- Bunyasakseri, T., & Phaholthep, C. (2014). *The Renovation Guideline for the Physical Improvement in Respondent to disabled persons usability in the Public Zone under Universal Design Approach: A Case of*

- Naresuan University Hospital (R2557C128)*. Naresuan University, Phitsanulok, Thailand.
- Department of Empowerment of Persons with Disabilities (2012). The ministerial regulations regarding facilities for the disabled and elderly of Thailand 2005. Sample models of facility design for a person with disability and all ages, 2nd Edition. Ministry of Social Development and Human Security (MSDHS), Thailand
- Dharmthamrong, K. (2002). Architectural Design for All. *Journal of Architectural/Planning Research and Studies*, Volume 1, Faculty of Architecture Thammasat University, Thailand.
- Eiemutthma, J. (2013). Design Guideline of Physical Environments within Buildings that Support the Behaviour and Activities toward Accessibility for Persons with Disability (the waist down): A Case Study on Building of Bangkok University (Master's thesis), Bangkok University (Kruaynamthai Campus), Thailand.
- Kroll, K. (2005). *Evidence-based design in Healthcare Facilities*. Retrieved September 8, 2014, from <http://www.facilitiesnet.com/healthcarefacilities/article/Better-Health-From-Better-Design-Facilities-Management-Health-Care-Facilities-Feature--2425>, URI: <http://shura.shu.ac.uk/id/eprint/492>
- Longo, E. (2012). *Le relazioni giuridiche nel sistema dei diritti sociali*. Profilit teorici e prassi costituzionali. Retrieved from http://works.bepress.com/erik_longo/1/
- Murphy, P. (2012, February). *Way-finding Planning for Healthcare Facilities*. GNUgroup. Retrieved from <http://www.gnu.org.com/thought-leadership/healthcare-wayfinding/>
- Phaholthep, C., Sawadri, A., & Skates, H. (2016). *An Evaluation of Public Space Accessibility Using Universal Design Principles at Naresuan University Hospital*. Springer International Publishing Switzerland 2016 P. Langdon et al. (Eds.), *Designing Around People*, 231-236, http://DOI10.1007/978-3-319-29498-8_24
- Preiser, W. F. E., & Ostroff, E. (Eds.) (2001). *Universal design handbook*. McGraw-Hill, New York, NY, USA
- Preiser, W. F. E., Verderber, S., & Battisto, D. (2009). Assessment of health center performance: Toward the development of design guidelines. *International Journal of Architectural Research*, 3(3), 21-44, URI: <http://archnet.org>.
- Preiser, W. F. E. (n. d.). *Design and Health*. International Academy for Design and Health. Retrieved from <http://www.designandhealth.com/upl/files/122195>.
- Preiser, W. F. E., Rabinowitz, H. Z., & White, E. T. (1988). *Post-Occupancy Evaluation*. New York, USA: Van Nostrand Reinhold.
- Setola, N., Borgianni, S., Martinez, M., & Tobar, E. (2013). *The role of spatial layout of hospital public spaces in nformal patient-medical staff interface*. Proceedings of the 9th International Space Syntax Symposium, Sejong University, Seoul, South Korea
- Sahachaiseri, N. (2012). *Sustainable design paradigm. Teaching documentary*. King Mongkuk's Institute of Technology Ladkrabang, Thailand
- Ulrich, R. S., Zimring, C., Zhu, X., DuBose, J., Seo, H. B., Choi, Y. S., Quan, X., & Joseph, A. (2008). A review of the research literature on evidence-based healthcare design. *Health Environments Research & Design Journal*, 1(3), 61-125.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Business Coevolution: Considerations from the Mobile Telecommunication Sector in Latin America Economy

Hugo-Alberto Rivera-Rodríguez¹ & Sergio-Andrés Pulgarín^{1,2}

¹ School of Management, Research Group DIGE, Universidad del Rosario, Bogotá, Colombia

² School of Management, Head of Innovation Center INNOVA-Universidad del Rosario, Bogotá, Colombia

Correspondence: Hugo-Alberto Rivera-Rodríguez, School of Management, Universidad del Rosario, Bogotá. Calle 200 entre Carrera 7 y autopista Norte, Colombia. Tel: 571-297-0200. E-mail: hugo.rivera@urosario.eu.co

Received: February 8, 2017

Accepted: February 22, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p147

URL: <https://doi.org/10.5539/ass.v13n4p147>

Abstract

The dynamic and interaction between companies and the environment leads to atypical emergences addressed by the strategic business direction mainstream. In this document the introduction of *CoEvolutionary Relationships* is presented to explain how some groups of companies that are facing business turbulence, not only survive, but grow rapidly in an internal dynamic space and transformational environment, becoming an attractive investment option. To explain this phenomenon, the field of mobile telecommunications in Colombia is studied, applying a mixed methodology that includes semi-structured interviews and the analysis of documentary content (ADC). The findings reflect a structural link between a turbulent environment and a group of companies that developed growth in their sector despite the turmoil.

Keywords: Analysis of documentary content (ADC), coevolution, mobile communication, strategic behavior, turbulent environment

1. Introduction

Additionally of the study and the understanding of internal company factors as a source of advantage, the field of strategic management has addressed the notion of environment and its impact on business performance. The first approach to the concept, focuses on environment reflection as a variable or set of independent variables, capable to affect positively or negatively (Andrews, 1971) the results and the strategic behavior of firms (Emery & Trist, 1965; Khandwalla, 1972, 1974; Ansoff, 1987), deterministically. Thus, the environment influences the opportunities and/or threats (Anderson & Payne, 1975; Jauch & Kraft, 1986) in a group of companies that the director diagnoses, plans and executes actions to adapt to new enterprises states and conditions (Rumelt, 1984; Ansoff, 1987), either anticipating future configurations reality (Godet, 1995) or to react to new emerging conditions (Mintzberg & Waters, 1982).

At the same time, framework advances of the general system theory (Von Bertalanffy, 1956) allow the recognition of an organic nature for the company (Burns & Stalker, 1961), meaning that the same way as it is in open systems and its environment, companies are contained by an environment built from the interaction of their own actions and decisions, the idea of *company-system* pretends to recognize the existence of cycles and relations between those two components, relocating the environment from an independent position, to a sensitive manipulation of surrounding structures, and companies themselves.

In this area, the strategic direction focuses an important part on development the understanding of business-environment relationships (Burns & Stalker, 1961; Ansoff, 1965; Aguilar, 1967; Thompson, 1967 Miles & Snow, 1978; Pfeffer & Salancik, 1978) where both components complement one another, forming a whole, this is why is not possible to understand the phenomena and behaviors of enterprises independently. In contrast, they must be linked to understand the environment where it operates. Given these conditions, the next challenge for the strategic direction was focused on going in-depth on understanding the own characteristics of the *company-system*, studding aspects such as, the dynamic of the interactions between different integrator components of the company and its environment. Furthermore, the study of flows and their consequent variation sensitivity in the initial conditions, which allowed to formulate typologies to describe the *company-system* environment, some of them defined it as uncertain, munificent, hostile, dynamic and/or abrupt.

This typologies diversification, rather than clarifying the understanding of the environment-company relationship, generated a greater divergence given the theoretical differences of each to approach, for which Dess and Beard (1984), Gueguen (1997), Crossan, Vera and Nanjad (2008), among others, proposed to group all these types under the category of *turbulent environment*. Although the notion of turbulence had already been introduced since the mid-twentieth century in the field of strategic management, its ability to integrate the different types mentioned has positioned itself as one of the most widely used terms to explain the properties of business environment, transformation phenomena, interaction, discontinuity and dynamic concepts.

In this area, the environment is subject to the influence that comes from the actions implemented by companies to face turbulence (Eisenhardt & Galunic, 2000; Christensen, Schmidt & Larsen, 2003; Caldart & Ricart, 2006; Stead & Stead, 2013; Murmann, 2013). Similarly, some authors identified that there are situations where companies managed to surpass turbulence generating relationships of mutual feedback with the environment (Flier, Van Den Bosch, & Volberda, 2003; Lampel & Shamsie, 2003; Lewin, Long, & Carroll, 1999). The relevance of this line of work is that the environment goes from being a change force, to also acquire a dependence condition on structures components. Thus, the understanding of the company behavior, is not given by the existence of significant relationship between two variables, instead it is given by the emerging processes resulting from the interaction of a set of variables, aligning the organization study with the general system theory (Katz & Kahn, 1993).

The literature review, evidences a predation relationship between turbulence environments and belonging companies, where environment of greater turbulence leads to a higher corporate mortality rates compared to environments with contrary conditions, characterizing turbulence as an undesirable condition for any company. However, in some cases companies competing in turbulent environments besides surviving abrupt conditions, and discontinuous changes in the environment, but also get outstanding performance than those companies operating in environments with little turbulence performance (Drucker, 1980; Cameron, 1984; Rivera, 2010; Roberts, 2015; Stieglitz, Knudsen & Becker, 2016; Pontikes & Barnett, 2016). This situation leads to a central question for this research. How some companies not only survive but show a superior performance attractive for investors despite the constant fluctuations in the environment (turbulent conditions)? In this regard, recent studies recognize that strategic changes as reactions to the changing environment, improve the survival chance for businesses when there are significant changes in environmental conditions (Zúñiga-Vicente & Vicente-Lorente, 2006). It could be seem then, that the business-environment relationship both components can develop some kind of adaptation that makes survival possible (superior performance in companies with development opportunities) in highly turbulent environments with rapidly changing business.

The main purpose of this article is to characterize this type of adaptive relationship proposing a new relationship category inspired by the biological metaphor, particularly in intraspecific relationships of species (Begon, Howarth & Townsend, 2014) that allow them way to evolve jointly. Typology to be known as *Coevolutionary relationship*. In this typology high levels of environment fluctuations are combined with high levels of strategic transformation behavior of firms, achieving a structural coupling that besides being an entry barrier allows companies to obtain a better performance in the market. To explain this relationship, it is needed to go in-depth on the concept of turbulence and its implications for environment-related company. Different types of relationships between companies and their environment are presented to emphasize the category called Coevolutionary relationship between turbulent environment and strategic behavior, which will be explained from the mobile telephony findings in Colombia to conclude with the presentation of punctual findings.

2. Theoretical Framework (Environment, Turbulence and Strategic Behavior)

One of the first approaches to the environment role in the company is developed by Pepper (1934) which highlights the effect this has on performance, in this approach the relationship between business environment would be based on the determinism precepts and causality, where changes in the company are given as responses to changes in the environment that manifest in the way of opportunities or threats (Anderson & Payne, 1975; Jauch & Kraft, 1986). Around the same time, the emergence of the open system concept of von Bertalanffy (1956) led several authors to study in more detail the organization-environment (Burns & Stalker, 1961 relationship; Ansoff, 1965; Aguilar, 1967; Thompson, 1967; Miles & Snow, 1978; Pfeffer & Salancik, 1978) which would build the notion of business as a system (Emery & Trist, 1965)

Within this environment concept, specific terms emerged to differentiate various types of environments, among them are: uncertain environment, munificent, hostile, dynamic and abrupt (Caldart & Ricart, 2006). This situation, rather than clarifying the understanding of the relationship between environment and business, created confusion since it is difficult to classify as environment types, but as characteristics of the turbulent environment.

In order to unify the different concepts approaches, Dess and Beard (1984), Gueguen (1997), Crossan, Vera, and Nanjad (2008) proposed to group these types under the name of *turbulent environment* that is understood as a feature present in all changing environments in terms of magnitude and *scale*.

2.1 The Concept of Environmental Turbulence

According with Emery and Trist (1965) turbulence is an environment property characterized by the presence of an instability or underlying rate of change and because resources and constraints are constantly changing, this forces companies to react. Meanwhile, Khandwalla (1976-1977) indicates that turbulence arises by rapid and unpredictable changes in different aspects of the environment. But it was Ansoff (1979), who popularized the notion of turbulence, stated that it is the *raison d'être* of management, and that he was the leader in managing the surprises and discontinuities of this condition. Although this theoretical reflection served as a platform to popularize the concept, it was more focused on the analysis of the responsibilities of the leader than the study of the phenomenon as such. Ansoff (1979) indicates that turbulence is characterized by the variability of the market environment, the rate of change, the intensity of competition, the abundance of technology, and the concern for reducing pressures from governments and groups of influence. Years later, Ansoff (1990, 1993) proposed different levels of turbulence, indicated that these levels are characterized by the complexity of environmental events, knowledge of the succession of events, the rapid evolution of these events, and visibility Of these future events

Accepting the ideas around the concept of turbulence, Gueguen (2001) states that this is a chain of more or less spaced events in time, more or less favorable, but its magnitude is unpredictable, and at the same time they could be sufficiently new to make an impact on businesses, generating a reconsideration of the company strategy. What distinguishes a highly turbulent environment from other environment, is that this is composed by a greater dynamism, uncertainty and complexity. The dynamism refers to the speed that the structural characteristics of an environment varies, it could be evidenced in one or many elements conforming any environment on a macro or micro scale. It is important to outstand that it is not necessary to have radical changes to evidence the presence of dynamism, simply that these changes affect the behavior of companies.

Moreover, uncertainty refers to the impossibility to determine accurately the result of inside interactions within a system, in order to indicate that this feature contributes to the configuration of turbulence, it must be presented a complete absence of certain knowledge and clarity about the environmental conditions surrounding businesses. This situation affects the decision-making process that could condition the survival of the enterprises. Finally, the complexity understood as the property that makes indeterminable the behavior's system contributes to the environmental turbulence when companies get immersed in a state where environmental factors have not only increased in number, but given the operation conditions, some interactions with them are now becoming more frequent, direct and relevant. The degree of sophistication of the activity is often subject to change, which has led companies to seek new allies, or make changes in present relations until now.

At this point, turbulence can be indicated when discontinuities in political, economic, social, technological, environmental and regulatory factors affect the behavior of a sector, leading companies to modify their strategic behavior to deal with this period of turmoil without affecting their performance. Actions taken by companies may have more than one result for example it can impact performance, and additionally it can reconfigure the behavior of the sector generating political, economic, technological, environmental and legal changes. Thus, we find that networks feedback are nonlinear (Stacey, 1996), concluding that managing turbulence implies the possibility to understand and intervene the organization and its environment from a co-evolutionary relationship in which transformation occurs in the system and the surrounding components.

2.2 Relationship between Environment and Strategic Behavior of Firms

From the literature review it is needed to take into account the environment as an explaining and predicting factor of the occurrence of the companies when they face turbulence. In addition, it is observed that in the relation between a turbulent environment and a strategic behavior, the environment is addressed as a driving force that influences in the modification of the competitive positions. However, strategy literature has also stopped to document how the environment changes as a result of business decisions to face turbulence. The main changes are presented in regulatory aspects, changes in demand and the increase on sectorial competition. At this point, it can be conclude that business environment and conditions have motor skills and dependence when turbulence occurs, as concluded on much of the available turbulence and strategy literature.

In this article it is recognized the existence of a variety of relationship types between systems (e.g. companies, associations, foundations) with their environment, which have significant implications for the strategic behavior. It is then proposed four types of relationships: 1) Unidirectional 2) Single bidirectional 3) Bidirectional circular 4)

Bidirectional co evolutionary.



Figure 1. Scheme - way relationship. Prepared

Unidirectional relationships (Figure 1) have been described specifically for closed systems (Bertalanffy & Almela, 1976) referring to interactions between systems and/or components of a system where there is no feedback. Within the business sector, there is evidence that unidirectional relations could only be conceived as imaginary, this is due to the natural learning feature that every company has (Senge, 1994). However, a form of closed system can be explicated from the business axioms, where variability in environmental conditions does not affect the structure of the idea.; in the supermarket business *"customer is always looking for products that meet their needs"* and this unalterable axiom, the effects of changes in the paradigms of thinking, new business practices, the emergence of new explanatory models, transformations in the political and economic models, among others, do not pose any measure a variation of this axiom.

In contrast, the possibility of two-ways or bidirectional relationships imply their existence only in open systems or feedback systems, which are particularly described by Bertalanffy and Almela (1976) as reality systems, among other reasons for their learning ability which in business terms are significant. Bi-directionality becomes as the explanatory principle of the relationship between the environment and businesses, where in the same way as the environment has the ability to influence the behavior and performance of enterprises, the company can also influence behavior and environmental performance.



Figure 2. Diagram of two - way relationship. Prepared

The first type of relationship in this category has been denominated as simple bidirectional (Figure 2), referring to this basic property of the (Von Bertalanffy & Almela, 1976) open system. Although this is a two-way communication between the system and its environment, there is no evidence of the existence of a relationship mechanism between the causes, effects, and system variables. It also excludes time as interaction parameter. This means that the simple bi-directionality is expressed exclusively by the interaction pattern that the system has with its environment. Following the example of supermarkets, a simple two-way relationship is explicit in the interaction structures simplified, like the competitiveness of the sector. The model *"Market pull/Technology push"* (Escorsa & Valls, 2003) discloses a two-way relationship where the level of competitiveness of a sector is determined by the degree of incidence of market producers and marketers given changes in the existing needs, generating the effect of staking, while at the same time the group of companies that compete in product improvements in order to influence the purchase decision process in the market.

As a third type of relationship it has been defined the bidirectional circular (Figure 3) from the inclusion of a third element which develops a feedback cycle, energizing both the system and its environment. This is the initial space where the biological metaphor makes sense in the comprehension of the co-evolutive system behavior. Unlike simple relationships, circular bidirectional relationships assume the existence of two additional phenomena: 1) The dynamics of the system (O'Connor & McDermott, 1998), given by the constant interaction and feedback between the system and more than one component and 2) The variability of the system (Andrade et al., 2001), given by the useful changes for the system and its components as a result of interaction and feedback.



Figure 3. Schematic of bidirectional circular relationship. Prepared

Figure 3. Presents the minimum number of required elements (3) for the emergence of circularity, dynamics and characteristics of these relationships variability; however, in businesses and market systems the number of constituent elements can be significantly higher depending on their structure. In this scheme a third component called agent is integrated, an agent is an individual or structure that interacts with the environment (Gilbert, 2008) where their actions and interactions determines the system performance. In the context of the company, an agent can be treated as any individual or associated structure related to the enterprise- environment (e.g., customers, staff, shareholders, suppliers, current and potential competitors, governments, etc.)

In the example of supermarket chains, when they change its paying supplier’s policy, it affects those companies in the way that it impacts their cash flow. As a result of this situation, suppliers make the decision to increase the selling price of their products as a form of pressure to companies. As a result supermarket chains also increase prices to consumers, who are forced to reduce their purchase frequency, which subsequently affects the design of the policy payment if the payment frequency decreases excessively. In this relationship we can see how the effects of supermarket chains affect suppliers at the same time that affect consumers, and thus the effects of consumers influence the supermarket chain, creating a circular relationship.

Additionally, this particular behavior determines aspects such as feedback loops of both positively and negatively enterprise systems; meaning that the overall dynamics of the system can be attenuated or amplified (Beer, 1985) according to the interaction of its components or variables. Senge (1994) presents a detailed set of examples of circular relationships explaining how they have an overall effect on system performance either by attenuating or amplifying its dynamics.



Figure 4. Co evolutionary relationship scheme. Prepared

The last type of relationship to explore is the co-evolutionary. While the literature does not refer directly, the inclusion of this classification is necessary in this article to explain the existence of relations between the system and its components, where adaptation as a differentiating phenomenon characterizes the system's ability to survive changing environmental conditions. As part of the backbone of this document, this relationship will be described in detail below. Table 1 contains a description of the relationship types previously presented in order to explain the linkage between the company and environment.

Table 1. Relations company and environment. Self-prepared

Type of relationship	Implication	Characteristic	Relationship Effect
Unidirectional	Linking components	Environmental feedback absence	Communication system
Bidirectional Simple	Open system or interaction between systems and its components	The environment influences the strategic behavior of the company, and the company influences the environment behavior	System communication in both directions unchanged in strategic behavior.
Bidirectional round	Dynamics of the system and its components	Relations between the environment and the strategic behavior have a linkage mechanism able to attenuate or amplify the dynamics of the system	Feedback loops systems
Bidirectional coevolutionary	Transformation of the system and its components	Relations with different effects than zero – sum, the dynamics between the system and its environment contributes to adaptation.	joint adaptation

From this classification of relations previously presented, this article explores a particular condition to which we have called bidirectional coevolutionary relationship which seeks to explain the permanence of companies despite the existence of environmental turbulence.

2.3 The Concept of Coevolution and the Emergence of Coevolutionary Bidirectional Relationships

Coevolution refers to a process of simultaneous change between two agents where their interactions culminate in adaptive results set together different than a zero-sum game. In a business system companies or businesses groups develop adjustments that allow them to adapt to new adaptive environmental conditions which also are transformed based on individual decisions and interactions of each company. The first authors which used the term were Ehrlich and Raven (1964) to refer to the interdependence between species evolution in an ecosystem. With regard to business management, Lewin and Volverda (1999) argue that the backgrounds of the concept is 1) In the Weber bureaucracy focus, the bureaucratic organization is a response of change forces presented in the industry; 2) in strategy studies by Chandler (1962) about the emergence of the *M-Form* and coevolution with the

development of other industries; and 3) in the work of Weick (1979) on the psychology of organizations, which argues that members of a company are seen as a social construction of their environment, where the environment is represented simultaneously as something endogenous and exogenous.

Thereafter, starting from the coevolution foundations as a studied phenomenon, biology researchers began to notice the concept in the light of the systems adaptability (Kauffman, 1995) to use more accurately in the field of social systems. For example, Baum and Singh (1994) state that coevolution refers to a process involving successive changes between organizations and environment.

For its part, literature some work on strategic management has also applied the idea of coevolution, outstanding those using the "effect of the Red Queen" (Van Valen, 1973, Barnett, Greeve, & Park, 1994) to explain the sustainability of enterprises from constant evolutionary adaptation to emerging environmental conditions. Wright's work (1932) in the field of adaptive landscapes from biology illustrates this replicable behavior in the context of the company.

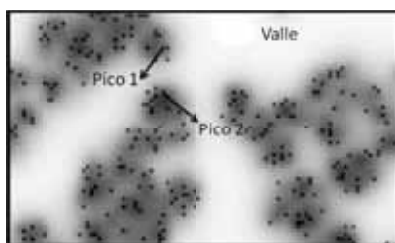


Figure 5. Representation Landscapes Adaptive made from Wright (1932)

An adaptive landscape is made up of two components 1) the height given by the ability of the genotype, referring to the ability of a property to reproduce and survive, and 2) the distance, understood as the population phenotypes average or all the possibilities of existing diversity. According to Wright (1932), living systems are constantly moving in the quest to achieve positions known as "local optima" (Peak 1) indicating that the system has been adapted to environmental conditions and survived. However, if the system seeks to evolve, i.e. move from peak 1 to peak 2, it must first move to a valley full of less adaptive intermediate states where natural selection would force it to climb the second peak in order to survive (Figure 5).

The constant movement of new states into living systems also explains a non-ergodic behavior (Kauffman & John, 2003) and thus dynamic, its ability to co-evolve in the environment they operate in parallel. Focusing on matters related to turbulence, some authors conclude that the relationship between companies and environment there are co evolutionary cycles of change before the existence of environment turbulence (Flier, Van Den Bosch, & Volberda, 2003; Lampel & Shamsie 2003; Caldart & Ricard, 2006), where the continuous transformation of system and environment, is essential for the survival of both. These cycles then assume the existence of co evolutionary bidirectional relationships between companies and their environment, enabling the evolution of the system as a whole.

This type of co evolutionary relationship between companies and their environment is also described by Maturana and Varela (1984), they explain the *structural links of second order* presented in the so-called autopoietic systems or self-generative, where *systems are coupled in their ontogeny when their interactions take on a recurrent or very stable character, resulting in a concordant historical structural assembly changes and when not disintegrate* (Maturana, 1984: 50). In this case as in businesses, the identity or set of characteristics of systems is specified by a set of processes inherent in the network structure where they interact, which explains the distinctive characteristics of a group of companies not only by the structure and individual actions of each, but also by the characteristics of the environment in addition to its internal interactions.

In order to characterize systems or sectors where there is evidence of an evolutionary behavior, below there are presented a set of factors that indicates the presence of a co evolutionary bidirectional relationship:

- 1) *multilevel* (co evolutionary implies that the effect occurs at multiple levels, within the company and between groups of homologous or complementary companies)
- 2) *multidirectional causalities* (meaning that parts of an organization co - evolve mutually with a change in the environment),
- 3) *nonlinearity* (the change can generate completely spontaneous transformations)
- 4) *Positive feedback* (influence their environment on different levels, among others, to institutions that

influence others, institutions influencing other institutions, as a consequence this repetitive interaction results in interdependencies and causality convoluted)

5) *Path dependence and history* (adaptations between companies are influenced by the knowledge and experience accumulated in the past).

Finally, a necessary condition for the emergence of co-evolution is the existence of mutually induced responses between two or more agents and / or their environment over time (Axelrod & Cohen, 2000; Eisenhardt & Galunic, 2000; Murmann, 2002). This means that the environment and businesses present successive changes where the company's feedback process affects and influences while displacing the environment to new states, and the environment feedback process affects and influences the same time the displacement of companies into new states. If reciprocity is canceled the co evolutionary process is completed and the company and the environment can evolve independently.

The presence of reciprocity also implies a mutual adaptation, i.e. the sustainability of enterprises and the environment are a joint task; thus the environment is embodied also by the existence and the dynamic of companies and vice versa. At this point, it is necessary to state the set of existing features in a co evolutionary relationship when referring to a turbulent environment. Those are:

- The general environment presents changes in political, economic, social, technological, environmental and regulatory factors in response to a stimulus or prior action of any of the agents involved.
- The link between the company and the turbulent environment leads companies to have more interactions with new sectors to carry out its business model.
- Systematical businesses, influence their environment, affecting other companies and sectors, so this repetitive interaction generates interdependence and circular causality.
- *The co evolutionary effect* occurs at multiple levels within the company and between organizations, showing multilevel.
- Both the company and its different areas co-evolve in the presence of change in the general and specific environment.

The process of mutual adaptation between business and environment is influenced by the knowledge and experience that have been building up over time.

It can be seen that, it is not enough to explore bidirectional or circular relationships; it is also necessary to explore the possible existence of a co evolutionary relationship between turbulence and strategic behavior of companies. This situation is critical because based on the literature review previously performed is seen that in the process of interaction between companies and turbulent environments both sides can adapt and/or affect each other, generating imbalances that require businesses to make reconfigurations of their strategic behavior to ensure its survival, a situation that can have an impact on the environment.

2.4 Mobile Telephony in Colombia: An example of Coevolution?

Theoretically speaking it is concluded that there is a co evolutionary relationship between turbulent environment and strategic business behavior, it becomes necessary to advance in the reflection that allows to illustrate this additional component, which does not include the explanatory apparatus of the system theory. In view of the above, it presents an analysis of the sector of mobile telephony in Colombia in 2000-2010, which seeks to illustrate this co evolutionary process between a turbulent environment and the strategic behavior of all the companies in the sector.

3. Methodology

Taking into account the variables that govern the relationship of business environment are multidimensional, a flexible and holistic methodology to address all aspects involved was used. It is used an exploratory study mixed, which took as its primary source of information a set of semi - structured interviews with members of the management staff of the mobile phone companies in the country, and as secondary documentation published (e.g. information and opinion columns, reports regulatory agencies, indices and sectoral indicators, etc.) available in different media, in order to perform a triangulation process information (Yin, 1981).

According to Yin (1981), this alternative is relevant when a) Is reduced the existing research around a topic, b) It has the desire to understand a contemporary phenomenon within its context of real life, c) The boundaries between the phenomenon and context are not clearly evident, d) Multiple sources of evidence, quantitative and/or qualitative research simultaneously, are used and e) Explore situations in which the intervention evaluated

does not have a clear and unique result.

Since there is little research that explores the co evolutionary relationship between turbulence and strategic behavior this document opens a space for reflection to the elements present in the companies that takes to operate under these specific circumstances. Additionally, it is turned to semi-structured interviews and Analysis Documentary of Contents (ADC), as a method to observe and recognize the significance of the present elements (words, phrases) in messages, texts or speeches, and classify them for analysis. This method allows to convert the crude data events that can be treated scientifically and build with them a body of knowledge. It is therefore a method of knowledge that facilitates the study of the documents either in groups or individually (by Lafuente-Lopez, 2001).

3.1 Selected Industry

This research focuses its reflection from the information collected in the sector of mobile telephony in Colombia since the beginnings of operations in 1994, and particularly in the period 2000-2010. The choice has been based on the presence of the essential turbulence characteristics:

- In the studied sector a number of destabilizing factors that tested the ability of businesses to operate were presented.
- As the sector is mediated by variations in available technologies, regulatory frameworks and investment intensity, the characteristics of uncertainty, dynamism and complexity, turbulent and constant changing environment is more obvious.
- As a result of the permanent changes in environmental factors themselves.
- It is a sector where the strategic behavior of companies has transformed the environment, an example of that is the change in communication patterns of people, creating "dependency" to mobile phone use.
- The actions implemented by companies have led the government to enact new regulations to ensure the normal development of the industry.
- It is a sector in which companies with their strategic decisions, can create new operating conditions by generating intentionally or unintentionally discontinuities in factors specific and/or general to the environment. This situation contributes to the generation of dynamism, uncertainty and complexity, setting up a situation of turbulence environment.

3.2 Collection of Information

Previously we a revision of the literature of scientific articles was made that did not allow to determine the dimensions of the business turbulence and the elements of coevolution. For the information gathering process, scientific articles are not used because the required sector information is not available. Therefore, reports are made of official Colombian government entities to obtain financial and market information. Likewise, interviews with experts of the sector are used.

In order to identify the presence of business turbulence and subsequent the co evolutionary relationship with companies, there were initially reviewed a series of official documents issued by control entities monitoring mobile phone sector such as the Regulatory Commission of Telecommunications (CRT), the Superintendent of Public Services, the Superintendence of Industry and Commerce, the Ministry of information Technology and telecommunications. The review of these documents focused on characterizing the general environment (political, economic, social, technological, environmental factors and legal) and identify important discontinuities development since its beginnings and particularly in 2000-2010.

Complementarily were consulted and analyzed documents published by each of the mobile operators studied (e.g. financial statements, prospectuses of shares, management reports, and sectoral presentations). With this information were identified changes in business strategies as a result of financial information, market, and technological obtained. This confirmed the presence of business turbulence.

At this point it is proceeded to contract information obtained from official sources and companies, and a review is done from several fronts 1) Press articles published between year 1994 to 2010 in major newspapers of Colombia (e.g. El Tiempo, El Espectador, La Republica). 2) Business Magazines (Dinero, Semana, Cambio), 3) Research in mobile telephony (American Association of research Centers Telecommunication Enterprises (AHCET), International Telecommunication Union (ITU) , Pyramid Research (PYR) , Center for economic Research and teaching (CIDE) , 3G Americas). 4) Entities union and the Colombian Chamber of Information Technology and Telecommunications (CCIT) 5) reports international events like ANDICOM 2003-2010

This review allowed in more detail contextualizes the environment and industry, corroborating the presence of turbulence and identifying the processes of change in each of the operators in 2000-2010.

Finally, to triangulate the information gathered, with experts interviews, two ministers of Telecommunications, 1 director of the Commission on telecommunications regulation, one director of the National Connectivity Agenda, 2 trade managers associations, 8 researchers from research centers, and 9 directors of the companies studied.

3.3 Characterization of the Mobile Phone Industry in Colombia

The review of the information, identified that the mobile telephony sector in Colombia since its beginnings in 1994, and during more than twenty years of operation, the industry has presented permanent changes in environmental factors that have tested the ability of firms to operate in it, which is reflected among other reasons in, sales processes, transformation and fusion (e.g. transition Celumovil - Bellsouth - Movistar, and Colombia Móvil (Ola) - Millicom (Tigo)). In particular, the first decade of the XXI century was characterized by the presence of turbulence as a result of dynamism, uncertainty and complexity in the environment. The ADC allowed in addition to identify the most important milestones of the sector during this period, which are:

- The arrival of multinationals to the sector that invested in technological upgrading allowing them to offer new plans to users. (E.g. income Millicom (Tigo))
- The popularization of mobile telephony and the migration of consumers from fixed line to mobile, using a greater proportion service known as prepaid, leded companies to offer products for different needs. (This is due mainly to the income in 2003 of Colombia Móvil (Ola) and to the response of competitors to face the new competition. a subsequent to the entry of this company year 74% of users used the prepaid mode)
- The union of events such as the increase in the number of users in the form of prepaid price war, and the growing use of services, sale of minutes have generated a decrease in ARPU (*Average Revenue per User*) what has forced operators to seek other sources of income, to adopt plans to reduce costs, find new users with more aggressive plans and increase revenue through services such as downloading ringtones, images and even text messages. (in 2001, the average price per minute was \$ 552, and in 2010 was reduced to \$ 41 regarding ARPU for Comcel in 2000era of \$ 666 and in 2010 of \$ 214; for Movistar in 2014 reached \$ 409 and 2010 to \$ 196)
- The increase in the dropout rate (*churn*) by users, was caused by the low *switching cost*. According to Santamaria (2009) in Colombia at the beginning of the century from 2000 to 2010 the main switching cost is the old user benefit, a situation that took advantage operators to retain customers, with permanence clauses. Since 2005, with the decrease in interconnection rates of operators, users could easily change suppliers.

Contrasting the highlighted events previously mentioned the characteristics of turbulence (Ansoff, 1979; Gueguen, 2001), allow to conclude that the sector studied in 2000-2010 was turbulent. The main reason to affirm it is the chain of unpredictable events and discontinuous in time is presented, favorable at some time and unfavorable in others, leading companies to make permanent changes in their strategic behavior. From interviews results and the consulted documentation is possible to determine that the major changes in the strategic behavior of Comcel were product development, the development of strategic alliances. As for Movistar, the most decisive changes were strategic market development and product development. Finally, Colombia Movil has developed a fusion strategy, product development and market.

4. Discussion

4.1 Co evolutionary Relationship between Variables

In conducting the characterization of the sector studied features of a co evolutionary relationship are present, since the information obtained from different sources does not present a trend towards balance between performance and behavior of the environment and performance and strategic behavior of firms within the sector; on the contrary, fluctuations in the analyzed data in different periods of time were so high and discontinuous that leded to question the existence and survival of the sector itself from the system paradigm.

When a co evolutionary bidirectional relationship occurs, it can be generally identified the starting point of this relationship, but it cannot be indicated a point of completion. In the analyzed period, the co-evolutionary process had its starting point when the Colombian government authorized by decree 575 of 2002 income of PCS operators to the telecommunications sector, leading to the entry in November 2003 of a Colombian Mobile enterprise with its OLA brand. The offer of the company is based on prices 10 times cheaper than competitors, and the launch of the latest technology. In just two months the company achieved more than 400 thousand users.

This situation changed the behavior of the industry, generating an effect on suppliers, customers, competitors, substitutes, investors, etc., leading to the existing operators to make adjustments to their strategic behavior in

order to face turbulence. The operators implemented several strategies such as, product development, market development, diversification, mergers, and alliances implementation. The average price per minute of \$ 183 in 2013 to \$ 105 in 2014.

As a result of these changes, companies and environment presented a process of mutual adaptation generating a link of the entire system. Thus, companies were able to face the turmoil, this contributed to the growth in users and revenue. The sector grew from 6.1 million users in December 2003 to 10.4 in December 2004, which led to an increase in telecommunications GDP from 3.4% to 12%. Revenues generated by the sector increased from 1,585 million to 2,319.

Between 2000 and 2005, and the government adjusted its regulatory conditions according to the new conditions in the sector, and the country's economy took a new configuration in which the mobile phone took a momentous role. The users changed their communication habits, indirectly leading companies to offer new applications that facilitate connectivity. Regulators assumed a more active role in the industry, not only exercising the role as regulators but to protect both users and competitors.

From 2010, the process of mutual adjustment continues, and there is still presenting strategic changes in companies from the sector, which in turn generates direct or indirect impacts in others. There have been environmental factors that have test the ability of companies, it is the case of the consolidation of an application like Whatsapp; changes in regulation that allowed Avantel be the fourth mobile operator Virgin Mobile and Mobile success Uff, enter as MVNOs. Likewise, it implements 4G technology, the merger of operations UNE and Tigo, the elimination in 2012 of permanence clauses compulsory for users.

These changes had various impacts on the sector. On one hand it generated a reorientation of the equipment market smartphones. The high-end equipment resented, and medium and low range grew, this measure has generated an increase in the theft of cellular equipment. To deal with this, among other measures, the national government in late 2015 established measures to import and export mobile phones, and established the mandatory requirement by users to register the IMEI mobile code.

Prices plans have dropped and companies started charging per second consumed. These measures led to growth in the number of users by the end of 2015, they reached 57 million. Some 13 million more than at the end of 2010. They have been changes in the regulatory environment, especially in the promulgation of regulations to control charging per second consumed, terms of permanence, extension of the spectrum. As usage habits, users use. A more detailed description is presented in the Table 2 of some effects of the turbulent environment and strategic behavior found relationship in the area studied.

Table 2. Coevolution Business environment and strategic behavior

Coevolution	Original situation	Consequences
Policy issues	The Colombian government stipulated the entry of a PCS operator. Aware of the competition to come, existing operators prepared new offers aimed at meeting the needs of users and to consolidate its presence in the market. Each made an investment of 250 million dollars in updating the networks	The new company offered lower prices, a different technology platform, and a wider range of phones. This increment rivalry, and accelerated the number of users expanding the service in low-income strata, which increased prepaid plans. Additionally, with the arrival of a new operator, suppliers' revenue increased and fixed telephony lost more ground. New regulations on tariff matters were generated, interconnection charges between incumbents and operator PCS, measures to protect the user in terms of customer service and change in operating conditions of radio companies (<i>trunking</i>). Users were maximizing the use of text messaging and the use of social networks as a communication alternative, leading to the decline in voice traffic.
<i>Economics issues</i>	In the period under review, the conditions of the economy had a direct impact on the sector studied. Demand for mobile phone service was affected positively or negatively depending on the conditions of the economy and performance indicators such as devaluation, level of employment, GDP	These fluctuations in demand led operators to aim to achieve a greater market share, and it made adjustments in the management and development method. They went to expansion strategies, external and cooperative development. Looking to protect users and ensure fair competition, regulators took action on tariff matters, creating taxes,

	growth.	reallocation of bands of the electromagnetic spectrum, customer service, position control domain, etc. This situation again hit demand and behavior of the sector.
<i>Social Aspects</i>	To the extent that people adjusted their communication needs as a result of internet development and consolidation of social networks, the industry adjust or its portfolio of products and marketing strategies were different.	The operators offered new plans focused on applications that facilitate social network communication, text messaging and data transfer. This increment or demand, which grew GDP sector. On the other hand, monitoring bodies took new measures to monitor new products and protect users, creating new effects on the behavior of operators.
<i>Technology</i>	The development of new technology platforms for the industry, which consolidates the use of digital technology. The operators made investments in order to increase their capacity in networks and technologies third and fourth generation, seeking to offer plans that include value - added services that operate over the Internet.	New offerings plan increase the number of users, who quickly replaced fixed telephony by mobile changing their consumption patterns using less voice traffic to text messaging and social networks. As a result of these changes, the economy benefited from sectoral GDP growth, which took the regulator agents to take steps to protect user's entities. It can be seen what began as a technological breakthrough, had an influence on products development and a change in social economic and regulatory conditions.
<i>Environmental aspects</i>	In the studied period a process of structural coupling environmental activities in the turbulent relationship between environment and strategic behavior of firms, punctually introduced changes have generated changes in ecosystem protection as a result of progress in the sector. According to the former	The Colombian government was forced to enact measures that will control the location of cellular infrastructure to control the visual pollution. Because of the growth of cellular coverage in the country, environmental regulation would have taken many years and perhaps would not have occurred.
<i>legal aspects</i>	With regard to regulatory aspects that generate coevolution in the sector, it may be noted that during the studied period permanent changes were presented in regulation, which made the companies adjust their strategic behavior. Some of these provisions were enacted to ensure the sector's growth, control operators, protection of users, implementation of new technologies, setting new taxes, tariff control.	In other cases, as a result of the dynamism and of the emergence of new operators or the launch of new business models, the rules generated in the market led regulators to modify the existing regulations, seeking to protect the sector in general. The regulation promulgated by the regulator intended to adjust the conditions of the industry, but is also result in technological change (emergence of new devices, new platforms) that impacted usage patterns by users. Thus, the regulation evolved to respond to users.

5. Conclusions

In reviewing the features mentioned previously for the presence of a coevolution situation in a turbulent environment, it is confirmed that the sector studied presented in the study period this condition.

Companies systematically affected their environment, influencing other companies and sectors, so this repetitive coevolutionary interaction creates interdependencies and causality. In this case the country's economy was consolidated by the business of mobile telephony, new businesses were developed, revenue from excise duties contribute to income generation for the country, and cultural transformation occurred to be replaced fixed telephony to mobile. Raided new international operators with new investments.

The link between the company and the turbulent environment leads companies to have more interactions with new sectors to carry out its business model. In this case, the mobile operators facing turbulence joined with other sectors to generate new products and services. Marketing of products is carried out in supermarkets, there are alliances with financial sector companies generating content etc.

The coevolutionary effect occurs at multiple levels within the company and between organizations, presenting to multiple levels. This situation was evident because companies made adjustments in different units, both in the areas of marketing, such as community relations, financial, etc., seeking to generate strategies that would address turbulence. Many of these adjustments were due to government requirements in technological and regulatory

matters as user protection provisions, implementation of new technologies. Thus the different areas of the company co-evolve mutually in the presence of change in the general and specific environment

The process of mutual adaptation between business and environment is influenced by the knowledge and experience that have been building up over time. Each of the operators took based on events occurring that could generate previously threats to the sector decision.

Based on the evidence discussed, emerges a seminal question: are the co evolutionary relationships a singularity of the telecommunications sector in Colombia? Or on the contrary these relationships are common and natural for most of the sectors today. While reaching a possible answer would mean repeating this study making use of heterogeneous samples in different sectors, observation evidenced the existence of similar behavior in other sectors, marked in those where a higher rate of innovation is a constant demand manner.

In this sense, it seems that the co - evolutionary behavior of these sectors is typified as a variety problem (Ashby, 1956). By studying the flow of information in computer systems. In a system-environment relationship, each system must be able to accommodate at least the total of possible states of the environment, otherwise the system will disappear. In conclusion, only variety can absorb variety (Ashby, 1956).

Then, the particular characteristic of sectors such as telecommunications in Colombia is that high levels of turbulence condition the survival of the system as a whole. Demonstrating the existence of coevolutionary relationships in real economic sectors means to observe, as stated Kauffman and John (2003) that the key for development of economies is not managing limited resources but rather the diversity management system. This research then opens a space for discussion to this notion of sector and company where the basis of superior performance is diversity.

It is evident in the study that the most significant contribution is the characterization of the coevolutionary relationship between the company and its environment, which involves emergent properties such as adaptation and the mutual survival, in addition to the structural coupling and the symbiosis present particularly in living systems. This finding helps to expand the knowledge base available to the study of the company as a dynamic system of constant adaptation, as well as opening the possibility to further studies, which could take as its starting point the transformative nature of the company.

References

- Aguilar, F. (1967). *Scanning the Business Environment*. New York: McMillan.
- Andrade, H. H., Dyer, I., Espinoza, Á., López, H., & Sotaquirá, R. (2001). *Pensamiento sistémico: diversidad en búsqueda de unidad*. Bucaramanga: Universidad Industrial de Santander.
- Anderson, C. R., & Paine, F. T. (1975). Managerial perceptions and strategic behaviour. *Academy of Management Journal*, 18(4), 811-823. <https://doi.org/10.2307/255380>
- Andrews, K. R. (1971). *The Concept of Corporate Strategy*. New York, Homewood: Primis Custom Publishing.
- Ansoff, I. H. (1965). *Corporate strategy: An analytic approach to business policy for growth and expansion*. New York: McGraw Hill.
- Ansoff, I. H. (1979). *Strategic Management*. London: MacMillan.
- Ansoff, I. H. (1987). *Corporate Strategy*. Harmondsworth: Penguin Books.
- Ansoff, I. H. (1990). General management in turbulent environments. *The Practising Manager*, 11(1), 6-27.
- Ansoff, I. H. (1993). *El planeamiento Estratégico. Nueva tendencia de la Administración*. México: Editorial Trillas,
- Ashby, W. R. (1956). *An Introduction to Cybernetics*. London: Chapman & Hall.
- Axelrod, R., & Cohen, M. D. (2000). *Harnessing Complexity, Organizational Implications of a Scientific Frontier*. New York: Basic Books.
- Barnett, W. P., Greve, H. R., & Park, D. Y. (1994). An evolutionary model of organizational performance. *Strategic Management Journal*, 15, 11-28. <https://doi.org/10.1002/smj.4250150903>
- Baum, J. A., & Singh, J. V. (1994). Organizational niches and the dynamics of organizational mortality. *American Journal of Sociology*, 100(2), 346-380. <https://doi.org/10.1086/230540>
- Beer, S. (1985). *Diagnosing the System for Organisations*. London: John Wiley & Sons.
- Begon, M., Howarth, R. W., & Townsend, C. R. (2014). *Essentials of Ecology (4th ed)*. London: John Wiley &

Sons.

- Burns, T. E., & Stalker, G. M. (1961). *The Management of Innovation*. London: Tavistock.
- Caldart, A. A., & Ricart, J. E. (2006). *Corporate Strategy in turbulent Environments: Key Roles of the Corporate Level*. Barcelona: IESE Business School - University of Navarra.
- Cameron, K. (1984). Organizational adaptation and higher education. *The Journal of Higher Education*, 55(2), 122-144. <https://doi.org/10.2307/1981182>
- Chandler, A. D. (1962). *Strategy and Structure: Chapter in the History of the Industrial Enterprise*. Cambridge, MA: MIT Press.
- Christensen, J. F., & Schmidt, M. L., & Larsen, M. R. (2003). Turbulence and Competitive Dynamics in the Internet Services Industry. *Industry and Innovation*, 10, 117-143. <https://doi.org/10.1080/1366271032000096608>
- Crossan, M., Vera, D., & Nanjad, L. (2008). Transcendent leadership: Strategic leadership in dynamic environments. *The leadership quarterly*, 19(5), 569-581. <https://doi.org/10.1016/j.leaqua.2008.07.008>
- Dess, G., & Beard, D. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29, 52-73. <https://doi.org/10.2307/2393080>
- Drucker, P. F. (1980). *Managing in Turbulent Times*. New York: Harper & Row.
- Ehrlich, R., & Raven, P. (1964). Butterflies and plants: a study in coevolution. *Evolution*, 18, 586-608.
- Eisenhardt, K. M., & Galunic, D. C. (2000). Coevolving: At last, a way to make synergies work. *Harvard Business Review*, 78(1), 91-101.
- Emery, F., & Trist, E. (1965). The Causal Texture of Organizational Environments. *Human Relations*, 18 (21), 21-32. <https://doi.org/10.1177/001872676501800103>
- Escorsa, P., & Valls, J. (2003). *Tecnología e innovación en la empresa: Dirección y gestión*. Bogotá: Alfaomega.
- Flier; B., Van Den Bosch., F & Volberda, H. (2003). Co-evolution in Strategic Renewal Behaviour of British, Dutch and French Financial Incumbents: Interaction of Environmental Selection, Institutional Effects and Managerial Intentionality, *Journal of Management Studies*, 40(8), 2163-2187. <https://doi.org/10.1046/j.1467-6486.2003.00416.x>
- Gilbert, N. (2008). Agent-Based Models. *Quantitative applications in the social science 153*, London: Sage.
- Godet, M. (1995). *De la anticipación a la acción: Manual de prospectiva y estrategia*. Bogotá: Alfaomega Editores.
- Gueguen, G. (2001). *Environnement et management stratégique des PME: le cas du secteur Internet*. (Doctoral dissertation). Available from <http://www.sciencesdegestion.com/these/resumegael.PDF>
- Gueguen, G. (1997). Face aux turbulences, l'entreprise doit-elle être réactive? Propos de réflexion. *VIème conférence de l'AIMS*. Montreal: HEC.
- Jauch, L. R., & Kraft, K. L (1986). Strategic management of uncertainty. *Academy of Management Review*, 11(4), 777-790. <https://doi.org/10.5465/AMR.1986.4283934>
- Katz, D., & Kahn, R. (1993). Organizaciones y el concepto de sistemas. In MAP (Ed.), *Teoría de la organización. La evolución histórica del pensamiento organizativo. Los principales paradigmas teóricos*, 559-577. Madrid: Ministerio para las Administraciones Públicas, Imprenta Nacional del Boletín Oficial del Estado
- Kauffman, S., & Juan, L. (2003). *Investigaciones*. Barcelona: Tusquets Editores.
- Kauffman, S. (1995). *At home in the universe: The search for the laws of self-organization and complexity*. Oxford university Press.
- Khandwalla, P. N. (1974). Mass Output Orientation of Operations Technology and Organizational Structure. *Administrative Science Quarterly*, 19, 74-97. <https://doi.org/10.2307/2391789>
- Khandwalla, P. N. (1976-1977). Some top Management styles, their context and performance. *Organizations and Administrative Sciences*, 7(4), 21-51. <https://doi.org/10.4236/ajc.2014.22007>
- Khandwalla, P. (1972). Environment and its impact on the organization. *International Studies of Management and Organization*, 2(3), 297-313. <https://doi.org/10.1080/00208825.1972.11656125>
- Lafuente-López, R. L. (2001). Sobre el análisis y representación de documentos. *Investigación bibliotecológica*,

- 15(30), 164. <http://www.ejournal.unam.mx/ibi/vol15-30/IBI03009.pdf>
- Lampel, J., & Shamsie, J. (2003). Capabilities in Motion: New Organizational Forms and the Reshaping of the Hollywood Movie Industry. *Journal of Management Studies*, 40, 2189-2210. <https://doi.org/10.1046/j.1467-6486.2003.00417.x>
- Lewin, A. Y., Long, C. P., & Carroll, T. N. (1999). The coevolution of new organizational forms. *Organization Science*, 10, 535-550. <https://doi.org/10.1287/orsc.10.5.535>
- Lewin, A. Y., & Volberda, H. W. (1999). Prolegomena on coevolution: A framework for research on strategy and new organizational forms. *Organization science*, 10, 519-534. <https://doi.org/10.1287/orsc.10.5.519>
- Miles, R., & Snow, C. (1978). Organizational Strategy, Structure and Process. *The Academy of Management Review*, 3(3), 546-562. <https://doi.org/10.5465/AMR.1978.4305755>
- Maturana, H. R., & Varela, F.J. (1984). *El Árbol del Conocimiento*. Santiago de Chile, Editorial Universitaria.
- Mintzberg, H., & Waters, J. A. (1982). Tracking strategy in an entrepreneurial firm. *Academy of management journal*, 25(3), 465-499. <https://doi.org/10.2307/256075>
- Murmann, J. (2002). *The Coevolution of Industries and National Institutions: Theory and Evidence*. Discussion papers Social science Research, Center. Berlin.
- Murmann, J. (2013). The Coevolution of Industries and Important Features of Their Environments. *Organization Science*, 24, 1-21. <https://doi.org/10.1287/orsc.1110.0718>
- O'Connor, J. & McDermott, I. (1998). Introducción al pensamiento sistémico: recursos esenciales para la creatividad y la resolución de problemas. Barcelona: Urano.
- Pepper, S. (1934). The conceptual framework of Tolman's purposive behaviorism. *Psychological Review*, 41, 108-133. <https://doi.org/10.1037/h0075220>
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations*. New York: Harper & Row.
- Pontikes, E. G., & Barnett, W. P. (2016). The Coevolution of Organizational Knowledge and Market Technology. Forthcoming, *Strategy Science*. <https://pdfs.semanticscholar.org/26e6/1654c8161b296b567b42da483e979c80d7d5.pdf>
- Rivera. H. (2010). Cambio estratégico para entornos turbulentos. *Revista Facultad de Ciencias Económicas: Investigación y Reflexión*, 18(1), 87-117.
- Roberts, N. (2015). Absorptive capacity, organizational antecedents, and environmental dynamism. *Journal of Business Research*, 68(11), 2426-2433. <https://doi.org/10.1016/j.jbusres.2015.02.019>
- Rumelt, R. P. (1984). Toward a strategic theory of the firm. In R. Lamb (Ed.), *Competitive strategic management: Englewood Cliffs, NJ: Prentice Hall*, 556-570.
- Santamaría, D. (2009). *Estrategias y perspectivas de América Móvil en Colombia*. Bogotá: Universidad de los Andes.
- Senge, P. M. (1994). *The fifth discipline the art and practice of the learning organization*. New York: Currency Doubleday.
- Stead, J. G., & Stead, W. E. (2013). The Coevolution of Sustainable Strategic Management in the Global Marketplace. *Organization & Environment*, 26, 162-183. <https://doi.org/10.1177/1086026613489138>
- Stieglitz, N., Knudsen, T., & Becker, M. C. (2016). Adaptation and inertia in dynamic environments. *Strategic Management Journal*, 37(9), 1854-1864. <https://doi.org/10.1002/smj.2433>
- Thompson J. D. (1967). *Organizations in action: Social science bases of administrative theory*. New York City: McGraw-Hill.
- Van Valen, L. (1973). A new Evolutionary Law. *Evolutionary theory*, 1, 1-30.
- Von Bertalanffy, L. (1956). General system theory. *General systems*, 1, 11-17. <http://www.jstor.org/stable/2627469>
- Von Bertalanffy, L., & Almela, J. (1976). *Teoría general de los sistemas fundamentos, desarrollo, aplicaciones*. Ciudad de México: Fondo de Cultura Económica.
- Weick, K. E. (1979). Cognitive processes in organizations. *Research in organizational behavior*, 1, 41-74.
- Wright, S. (1932). The roles of mutation, inbreeding, crossbreeding and selection in evolution. In: *Proceedings*

6th International Congress on Genetics 1, 356-366.
<http://davinci.nhm.ku.edu/books/6th-congress/facsimile/contents/6th-cong-p356-wright.pdf>

Yin, R. K. (1981). The case study as a serious research strategy. *Science communication*, 3, 97-114.
<https://doi.org/10.1177/107554708100300106>

Zúñiga-Vicente, José Á. and Vicente-Lorente, J. D. (2006). Strategic Moves and Organizational Survival in Turbulent Environments: The Case of Spanish Banks (1983–97). *Journal of Management Studies*, 43, 485–519. <https://doi.org/10.1111/j.1467-6486.2006.00599.x>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Financial Incentives for Adopting Cloud Computing in Higher Educational Institutions

Ali Al-Badi¹, Ali Tarhini¹ & Wafaa Al-Kaaf¹

¹ College of Economics and Political Science, Department of Information Systems, Sultan Qaboos University, Muscat, Sultanate of Oman

Correspondence: Ali Tarhini, College of Economics and Political Science, Department of Information Systems, Sultan Qaboos University, Muscat, Sultanate of Oman. Tel: 974-5012-1922. E-mail: alitarhini@squ.edu.om

Received: February 9, 2017

Accepted: March 2, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p162

URL: <https://doi.org/10.5539/ass.v13n4p162>

Abstract

Teaching today relies a great deal on IT resources which require large investments and there are many higher institutions that cannot afford such investments. Educational institutions usually search for opportunities to better manage their resources, especially after the economic crisis, which has resulted in reducing government support, especially in western countries. It is argued that 'cloud computing' is one of those opportunities for any educational institution due to its benefits in terms of cost reduction. Today, 'cloud computing' can be seen as one of the latest dynamic services in the IT world because of its flexibility. This paper investigates the financial incentives for adopting cloud computing in higher educational institutions. To achieve this objective the research employs a qualitative method to collect the data. Interviews were conducted with a number of cloud service providers, experts in the field and users/potential users of the cloud. The results reveal that cloud computing drives down up-front and on-going costs, and that the number of IT staff can be reduced if the cloud is adopted. Disaster recovery and business continuity are other cost-savings areas for an educational institute in adopting the cloud, and cloud computing provides low cost testing and a development environment solution.

Keywords: cloud computing, technology adoption, financial incentives, cost saving, higher educational institutions, Oman

1. Introduction

Recently higher educational institutions have been facing more demands for extra technology services, but managing these demands is not an easy task (Alenezi et al., 2015; Tarhini et al., 2016; Alalwan et al., 2016). Thus the concept of cloud computing has emerged as a promising solution for those institutions that suffer from budget limitations (Mas'adeh, 2016; Al-Mascati & Al-Badi, 2016). Cloud computing is known as a model that provides on-demand services, infrastructure, and application software over the network (Sultan, 2010; Almajali et al., 2016). Cloud computing is a new technology which provides users with storing, sharing, accessing and controlling data online in an effective manner (Yadav et al., 2014; Maqableh et al., 2014). Cloud computing is not exclusive to the business world; it also makes a huge difference in the educational world (Al-lawati & Al-Badi, 2016; Al-Qirim et al., 2017). Therefore, a number of higher institutions have already adopted it or are considering doing so.

Adopting cloud computing brings several benefits to the higher institutions from two dimensions (the educational and financial): Firstly, in the educational field, cloud computing enables students to acquire personal portfolios, assignments and web-based self-services. Instructors will also be able to manage the large data efficiently and have access to flexible teaching systems (Yadav et al., 2014; Sharma et al., 2016). In addition, cloud computing provides both students and instructors with data availability anytime and anywhere which will enhance the whole learning experience (Kumar & Murthy, 2013; AlKharusi & Al-Badi, 2016). Secondly, from the financial aspect cloud computing helps universities cut down the cost because of the option of only paying for what is used (the pay-as-you-go model) (Hignite et al., 2010; Al-Qirim et al., 2017). The cost of resources will be reduced as all kinds of hardware, software, platform and unlimited storage will be shared on the cloud (Mircea and Andreescu, 2011; Yadav et al., 2014). However, institutions are still facing some challenges and concerns regarding cloud computing adoption such as security, control, preference, and reliability (Hignite et al., 2010; Karajeh et al., 2016).

Although most studies that have been conducted on cloud computing were focusing on education as a tool to enhance learning systems, this paper will be exploring the financial incentives for adopting cloud computing in higher institutions (Al-Badi et al., 2013). It will discuss the cost reduction possible through cloud computing adoption in terms of up-front and on-going costs.

The paper is structured as follows. Section 2 reviews the related literature about cloud computing. Section 3 highlights the research methodology. Section 4 contains the findings and discussion. Finally, there are some concluding remarks and recommendations for higher educational institutions in this regard:

2. Literature Review

2.1 What Is Cloud Computing?

The term ‘cloud computing’ has become very popular in the world of information technology (IT) (Ercan, 2010). The American National Institute of Standards and Technology (NIST) define cloud computing as “a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction”(Mell and Grance, 2011). In simple words, cloud computing is a model which provides convenient, flexible, dynamic resources and services (e.g., applications, storages, communication, collaboration, and infrastructure) delivered on demand over the internet (Furht & Escalante, 2010; Dwivedi et al., 2010; Erkoç & Kert, 2011).

Cloud computing has many benefits associated with it, such as a reduction in implementation and maintenance costs, flexibility and scalability of infrastructures, and speed of access to the market (Singh and Hemalatha, 2012). In addition, cloud computing helps in protecting the environment because it reduces energy consumption and hence its carbon footprint (Sultan, 2010; Al-Qirim, 2011; Al-Harthy & Al-Badi, 2014; AlZadjali et al., 2015).

2.2 Cloud Computing Service Models

Cloud computing offers three main service models, which are Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS):

- Infrastructure as a Service (IaaS) is a way to deliver resources as a service over the internet, which includes a full computer infrastructure (e.g., virtualized computers, servers, storage, network, etc.) (Sultan, 2010). Instead of purchasing these fundamental computing resources, clients can acquire raw computing power as an entirely outsourced service on demand without any capital outlay (Kovačević, 2012; Orozco et al., 2015). A study done by Srinivasan (2014) declares that 73% of the users reduced their infrastructure costs because of the availability of cloud services using IaaS (Srinivasan, 2014).
- Platform as a Service (PaaS) is a platform that provides a development environment over the internet. PaaS allows developers to build their applications quickly and easily by using providers’ servers without the need to buy or maintain the software and infrastructure. Developers have no control over the cloud infrastructure (network, servers, operating systems, etc.), but they may control the developed applications, and possibly the configuration settings for the application-hosting environment (Kovačević, 2012).
- Software as a Service (SaaS): is a software distribution model that provides access to applications and data through an internet connection anytime and anywhere (Erkoç & Kert, 2011). SaaS reduces the cost of software licensing, eliminating the need for the end-user's server hardware, network security devices and software upgrade and maintenance expenses (Shunye et al., 2014). Furthermore, there will be no need for IT investment, personal computers and internet connections to obtain the required software and services (Furht & Escalante, 2010). The following table shows a comparison between IaaS, PaaS, and SaaS service models:

Table 1. The differences between IaaS, PaaS, and SaaS; source: (Khurana and Verma, 2013)

Service model	Paradigm shift	Characteristic	Advantage	Disadvantage
IaaS	Infrastructure as an asset	<ul style="list-style-type: none"> • Platform independent. • Infrastructure costs are shared. <ul style="list-style-type: none"> • Pay by usage. • Service level agreements. 	<ul style="list-style-type: none"> • Reduction of ROI risk. <ul style="list-style-type: none"> • Avoids capital expenditure on hardware. 	<ul style="list-style-type: none"> • Greater long-term cost • Efficiency depends on cloud provider’s capabilities.
PaaS	License purchasing	<ul style="list-style-type: none"> • Consumption by cloud implementation. 	<ul style="list-style-type: none"> • Streamlined version deployment. 	<ul style="list-style-type: none"> • New security measures required.
SaaS	Software as an asset	<ul style="list-style-type: none"> • SLAs. • Cloud components. • Communications via APIs. 	<ul style="list-style-type: none"> • Avoids capital expenditure on software. • Reduction of ROI risk. 	<ul style="list-style-type: none"> • Centralization of data requires new security measures.

2.3 Cloud Computing Deployment Models

There are four deployment models of cloud computing, which are:

- The public cloud: this is a cloud model that is available to the general public and large industrial groups (Bansal et al., 2012). The public cloud is owned and provided by organizations who sell cloud services (Agarwal, 2011). Amazon Elastic-Compute-Cloud, IBM's Blue cloud, Sun Cloud, and Google App Engine are all examples of organizations selling cloud services (Rao et al., 2013). The main benefits of public cloud are that it is easy, inexpensive and scalable (Agarwal, 2011).
- Private cloud: This is a cloud model that provides a secure and separate cloud service environment that is operated only for a specified user (Rao et al., 2013; Sinjilawi et al., 2014). This type of cloud can be managed by the user or third party (Bansal et al., 2012). Since the private cloud is dedicated to a specific user, it provides more privacy, security and control (Rao et al., 2013). Implementing the private model allows the user to respond faster to business needs, reduce costs, and increase elasticity (Agarwal, 2011).
- Community cloud: This is a cloud model that is shared by a number of organizations who share a common mission and interests (Agarwal, 2011; Qasim & Abu-Shanab, 2014). This type of cloud model can be managed by organizations or by third party (Bansal et al., 2012). Google "Gov cloud" is an example of a community cloud (Rao et al., 2013). The community cloud is more expensive than public cloud, because the costs are spread over fewer users (organizations) (Rao et al., 2013; Obeidat et al., 2016).
- Hybrid cloud: This is a model where two or more cloud models (public, private, or community) are combined together (Rao et al., 2013). This type of cloud can be maintained by internal or external providers (Agarwal, 2011). In addition, these models are bounded by standardized technology (Bansal et al., 2012). Bounding the models allows the data and applications to flow between them in a controlled manner (Rao & Challa, 2013).

2.4 Cloud computing in the Sultanate of Oman

The Sultanate of Oman is a developing country which is in the process of developing infrastructure and services. As mentioned by Said Akar, regional director of EMC for the Gulf region, Oman is moving in the right direction and the adoption of cloud computing is at an advanced level (Nair, 2012). To be specific, higher educational institutions in Oman are seriously considering the inclusion of cloud computing in their IT strategy (Alkindi et al., 2015). A number of higher educational institutions in Oman have already adopted cloud computing and others are willing to adopt it in the future (Alkindi et al., 2015).

2.5 Cloud Computing in Higher Educational Institutions

The continuous growth in technologies increases the pressure on the institution's budget (Sultan, 2010). In addition, due to the instability of the economy today, higher institutions are facing a number of challenging factors such as increasing costs, increasing pressure on income, and competition and performance pressure (Mircea & Andreescu, 2011). This results in pushing higher institutions to adopt services and technologies that would minimize these challenges. Cloud computing would be the optimum choice for higher institutions, due to the considerable cost advantages associated with it. By using cloud computing, higher institutions can adopt new technologies without increasing pressure on their budget (Sultan, 2010). This is because cloud computing allows organizations to save costs and investment in newer technologies.

Today, higher institutions are required to update their software and hardware in order to attract students (Sultan, 2010). Cloud computing will allow higher institutions to do so since they provide services at an affordable cost (Idowu & Osofisan, 2012). In addition, cloud computing overcomes the challenges of traditional forms of technology in education such as the cost of hardware and software, the maintenance costs of IT setups, and a lack of trained teachers (Rao & Challa, 2013). When cloud computing is implemented in higher institutions it results in a reduction in the size of resources (e.g. electricity, servers, switches and cables), a reduction in hardware costs, increasing the computing power and storage etc. (Saleh & Abdalla, 2014).

Cloud computing is widely used for education purposes (Yadav, 2014). Students and teachers use cloud computing for learning, social interaction, content creation, publishing and collaboration (Yadav, 2014). The main users of cloud computing in education are: students, the faculty, administrative staff, the examination branch, and the administration branch, as shown in Figure 1 (Yadav, 2014). Cloud computing supports teachers in a number of ways such as helping teachers to prepare their teaching portfolio, presentations etc. (Rao and Challa, 2013). Moreover, cloud computing allows higher institutions to focus on teaching and research rather than spending time on IT configuration and software (Mircea & Andreescu, 2011).



Figure 1. The users of the cloud in education; source (Yadav, 2014)

The following figure shows how higher educational institutions would utilize the cloud services:

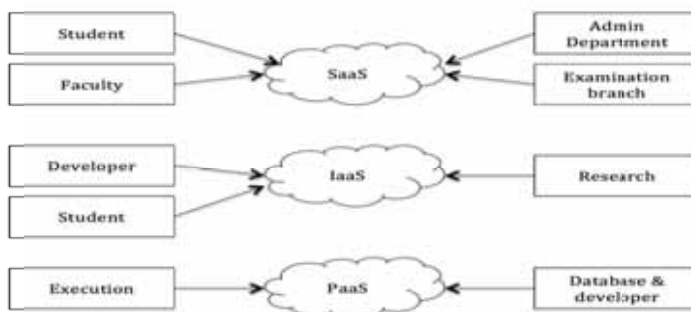


Figure 2. The usage of cloud services; source: (Yadav, 2014)

Figure 3 highlights the architecture of the cloud for education; the higher educational institutions may choose the private or educational cloud based on their needs and policies. The private cloud is appropriate for institutions who need to be able to access their own resources in the cloud (Mathew, 2012), whereas the educational cloud is appropriate for institutions that may share resources with other institutions (Mathew, 2012). In order to access the cloud services, private cloud would use the local network, whereas the educational cloud would use the public network (Mathew, 2012).

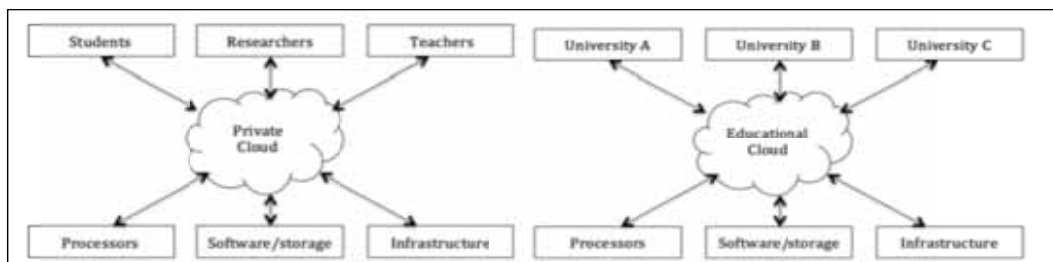


Figure 3. Cloud architecture for education; source (Mathew, 2012)

The following table shows the differences between the private cloud and educational cloud:

Table 2. The differences between the private and educational clouds; source (Mathew, 2012)

Feature	Private cloud	Educational cloud
Ownership & management	Owned and managed by a single institution only.	Owned and managed by the cloud service provider.
Access	Only students and employees in a single institution.	On a subscription basis.
Customization and control	By a single institution.	None.

There are number of cloud service providers dedicated to education. The following table presents some of these cloud providers:

Table 3. Cloud service providers for education; source (Lakshminarayanan et al., 2011)

Cloud service providers for education	Description
1. Microsoft Live@edu	<ul style="list-style-type: none"> • Provides a set of hosted collaboration services. • Hosts services such as communication tools, mobile, desktop, web-based applications. • Provides data storage facilities. • Offers free registration for universities, schools, and colleges. • Offers Office Live Workspace, Windows Live SkyDrive, Windows Live Spaces, Microsoft Shared View Beta, Microsoft Outlook Live, Windows Live Messenger and Windows Live Alert.
2. Google apps	<ul style="list-style-type: none"> • Web-based programmes and file storage. • Accessed through the web browser. • Offers Google Apps: Gmail, Google Talk and Google Calendar. • Offers Google Docs: text files, spreadsheets and presentations. • Offers iGoogle and Google sites for web pages development. • The services are available for free, as is Premium edition (primary, secondary and higher education). • Allows institutions to keep their own domain name without changing it.
3. Amazon web Services	<ul style="list-style-type: none"> • Offers web-based services in different areas: computer, software, content delivery, storage, database, deployment and management, application services, workforce. • Offers free usage credits and infrastructure for education, educators, academic researchers and students.

Regarding the concern that higher educational institutions have about the security of the cloud, there are a number of solutions to ensure the security and protection of their data: the masking or de-identification of the data, firewalls, encryption and key management, and authorization identity management (Mircea & Andreescu, 2011).

Today many higher institutions use e-learning to make the process of learning easier (Viswanath et al., 2012; Tarhini et al., 2015). E-learning is based upon using software applications in the virtual learning environment (Tarhini et al., 2014). E-learning is basically “an internet-based learning process, using internet technology to design, implement, select, manage, support and extend learning, which will not replace traditional education methods but will greatly improve the efficiency of education” (Vitkar, 2012). The traditional form of e-learning requires the following: 1) cost investment on the equipment needed; 2) development of e-learning; and 3) the maintenance of e-learning (Viswanath et al., 2012). In order to avoid such requirements of e-learning, higher institutions may use e-learning cloud services. Cloud-based E-learning allows higher institutions to experience: 1) great reduction of cost; 2) improvement in performance; 3) immediate software update; and 4) improvement of document format capabilities (Viswanath et al., 2012). In addition, cloud-based e-learning can be used to overcome problems such as a lack of proper infrastructure, lack of curriculum, lack of maintenance and technical support (Karim and Goodwin, 2013; Tarhini et al., 2016). Cloud-based e-learning is divided into five layers, which are: 1) the hardware resource layer; 2) the software resource layer; 3) the resource management layer; 4) the service layer; and 5) the business application layer (Viswanath et al., 2012) as highlighted in Table 4 below.

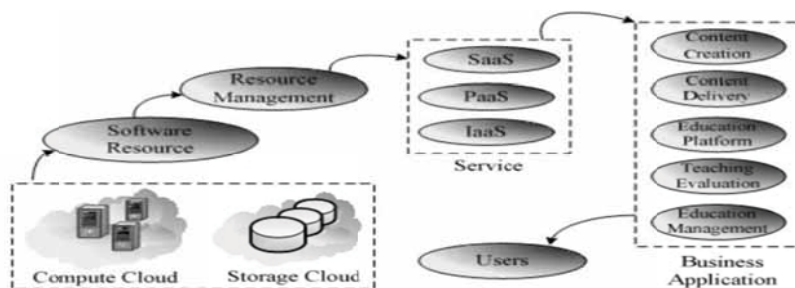


Figure 4. E-learning cloud architecture; source: (Viswanath et al., 2012)

To help higher institutions in implementing cloud computing successfully, Marinela and Ioana suggested a five step migration strategy to the cloud (Mircea & Andreescu, 2011) as stated below and outlined in Figure 5:

1. Development of knowledge on cloud computing: attending seminars and conferences to learn more about

cloud computing and its providers (Mircea & Andreescu, 2011).

2. Evaluation of the current situation of the institution, (regarding IT needs, structure and usage): understanding the current institution's IT infrastructure, and identifying technologies that meet the needs of the institution (Mircea & Andreescu, 2011).
3. Test of cloud computing solutions: undertaking developmental and environmental testing on data in the cloud, processing internal operations, and addressing components of both the public and private cloud to ensure that security and protection policies are in place (Mircea & Andreescu, 2011).
4. Selecting cloud computing solution(s): Identifying data, applications, functions, and the main processes in the institution (Mircea & Andreescu, 2011).
5. Implementation and management of cloud computing solution(s): The implementation can be done in iterative phases, and performed based on continuous evaluation of the cloud service benefits (Mircea & Andreescu, 2011).

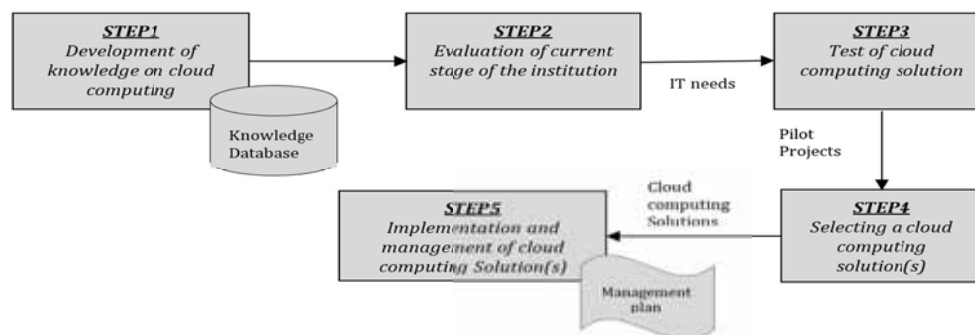


Figure 5: A five step migration strategy to the cloud; source: (Mircea and Andreescu, 2011)

2.6 Financial Benefits of the Cloud in Higher Educational Institutions

Nowadays many universities have recognized the potential effectiveness of using cloud computing in higher institutions. The Gartner Group found that 49% of institutions are already involved in some type of cloud computing (Carr, 2014). Cloud computing helps universities to concentrate more on the education and research activities rather than on complex IT configuration and software systems (Mircea & Andreescu, 2011).

There are many reasons for institutions of higher education to move from traditional IT infrastructure to cloud computing. Regardless of its benefits to e-learning solutions and providing educational services directly through cloud providers, the most cited benefit of cloud computing is still the financial benefit. In fact, IDG's 2012 Cloud Computing Survey found that "even though there are higher short-term costs for implementing cloud initiatives, the majority of organizations (63%) agree/strongly agree that there will be long-term cost savings" (Mircea & Andreescu, 2011).

Adopting a need-based computing approach offers full up-front control of costs, which reduces capital expenditure (Erl et al., 2013). Cloud computing allows higher educational institutions to scale up or scale down resources and storage based on their current needs as institutions can start and stop resources on demand, which means that as soon as the user no longer needs the service they will stop paying for it immediately (Anand & Kamayani, 2015; Rogers & Cliff, 2012).

Moreover, cloud computing supports the pay-as-you-go pricing model (Chorafas, 2010). This model enables users to only pay a rental for the facilities they employ (Srinivasan, 2014). Cloud computing is likely to reduce expenditure in this area and also reduce on-going costs because institutions can lower the costs of physical space and associated overheads (Carr, 2014), equipment maintenance and upgrades, and the electricity consumption and cooling that are needed to run PCs, servers, switches, and backup drives (Sultan, 2010).

Since the infrastructure is owned by cloud service providers, there will be no need for software licensing or updating. As a result, fewer IT staff will be needed, and for those institutions that are lacking IT staff, the cloud will help them eliminate the costs of third party hardware repair bills. North Carolina State University achieved a substantial reduction in their expenses as they no longer had to pay for a software license, while at the same time reducing campus IT staff with full working schedule from fifteen to only three employees (Mircea & Andreescu, 2011).

Furthermore, the cloud provides low cost disaster recovery (DR) solutions and reduces the impact of failures at

the disaster site. A study conducted by Wood et al. (2010) compared the costs of running DR services using the public cloud with those of privately owned resources, and the results showed that the cost reductions increased by 85% through taking advantage of cloud resources (Wood et al., 2010). Additionally, the testing and development environment of the cloud reduces the unit cost, while increasing effectiveness. Using the cloud for testing and development allows institutions to shift from capital expenditure, CapEx, to a flexible operating expenditure model (OpEx), since there is no longer the need to make up-front investments in infrastructure, tool licenses, and configuration and maintenance of test environments (Mylavarapu, 2011).

Apart from financial benefits, cloud computing provides many other benefits for students, teachers and institutions:

- For students: cloud computing provides them with a wide variety of resources and software tools, based on their learning interests and style (Yadav, 2014). By using cloud computing, students can access, share and publish documents, class documents, and webpages (Rao & Challa, 2013). Moreover, students can access material anytime (24x7x365) and from anywhere by using any device such as a PC, laptop, PDA (Kalpeyeva & Mustafina, 2013).
- For teachers: the capabilities of cloud computing for education allows teachers to teach in new and different ways, helping the teachers to reduce their workload and project management (Rao & Challa, 2013). In addition, teachers can access, share and publish documents and class documents (Rao & Challa, 2013). Rather than having to carry the hard copies of documents around, teachers can access what they need through a web browser (Mathew, 2012). Teachers can also access material anytime (24x7x365) and from anywhere by using devices such as PCs, laptops, PDA (Kalpeyeva & Mustafina, 2013).
- For higher institutions: cloud computing allows them to use the latest technologies in order to meet the growing educational needs (Yadav, 2014). Using cloud computing in institutions reduces the carbon footprint, which helps to protect the environment (Yadav, 2014). In addition, it allows higher institutions to use and develop different software platforms without any complexity, providing institutions with high computing capacity, and allowing them to change system without any effort or loss of time (Morgado, 2011). Higher educational institutions may conduct 'virtual' classes, use 'virtual' laboratories and 'virtual' machines based on the number of students (Kalpeyeva & Mustafina, 2013). Moreover, cloud computing allows higher institutions to outsource some of its IT functions to the cloud provider (Kalpeyeva & Mustafina, 2013).

2.7 Implementation of Cloud Computing in Higher Educational Institutions: Examples

The University of Westminster (UOW) in the United Kingdom, that has more than 22,000 students, uses cloud computing in order to benefit from the services and cost advantages associated with it (Sultan, 2010). UOW uses Google cloud services (the education edition) for the email system (Google mail) (Sultan, 2010). Google mail provides services for UOW without any cost, and their email facilities include: 7.3GB capacity for each student, allows users to keep their domain names without changing it, and provides applications such as word processing, spreadsheet and presentation (Sultan, 2010). In addition, UOW estimated the cost of the same facilities, if done internally, would cost them £1,000,000, whereas Google mail costs them nothing (Sultan, 2010).

Another example is that of George Bacovia University in Romania, which has a number of problems when it comes to dealing with their independent systems, which are: the need for reliable hardware, maintenance activities on a regular basis, and difficult flow of information because the systems are not integrated (Bucşă & Ocneanu, 2014). To overcome these problems, George Bacovia University implemented cloud services with Google apps for education (Bucşă & Ocneanu, 2014). Google offers its services free to educational institutions (Bucşă & Ocneanu, 2014). By implementing cloud services George Bacovia University was able to: cut costs in software licensing and maintenance of applications, cut investment in information security and maintenance, while gaining the ability to access resources anywhere and at any time, along with the ability to share information (Bucşă & Ocneanu, 2014).

Also, Kaunas University of Technology (KUT) in Lithuania has adopted cloud computing services (Darus et al., 2015). KUT moved the following systems onto the cloud: the university e-mail system, the academic information system, the library information system, and the e-learning system (Darus et al., 2015). Implementing cloud computing allowed KUT to cut investment in resources such as hardware, software, experts etc. (Darus et al., 2015).

In general, the following is a list of potential saving areas of leasing cloud-based IT resources as opposed to the purchase of on-premise IT resources (i.e. having own data center):

Table 4. Saving areas of leasing cloud-based IT resources

Up-front costs	On-going costs
<ul style="list-style-type: none"> • Hardware (servers, PCs, ...etc.) • Software • IT staff (required for setup and deployment) • Disaster recovery infrastructure • Development and testing environment 	<ul style="list-style-type: none"> • Maintenance and underlying infrastructure • Licensing fees • Electricity • Software and hardware upgrading

*This table is only to represent the saving areas, which was investigated through the current study.

3. Research Methodology

A survey has been employed in this study through conducting interviews in order to explore the financial incentives for adopting cloud computing in the higher educational sector. To achieve the stated objective, three different groups participated in this research:

- 1) Cloud service providers: a number of interviews were conducted amongst cloud service providers to investigate the cost of building the cloud environment from different aspects, and probing the services that they offer.
- 2) Experts in the field: a number of interviews were conducted amongst experts in the field of cloud computing, in order to understand how cloud computing can be a better choice for higher institutions.
- 3) Users/potential users of the cloud: a number of interviews were conducted amongst users/potential users of the cloud in higher educational, in order to explore the financial incentives and benefits of using the cloud in educational institutions.

There were 25 interviews, 13 of them with the cloud service providers, 10 with the experts and two with users/potential users of the cloud. The survey (interview) consists of eight questions that focused mainly on the objective of this study.

4. Findings and Discussion

Analyzing the data collected from the interviews shows that the up-front costs (expenses that are charged at the beginning) of the cloud solution are much lower than those of the on-premise environment. Regarding the latter, experts and service providers said that there would be a requirement for huge capital expenditure (CapEX) in order to provide an integrated data center, since the educational institutes would have to buy physical servers (e.g. mail server, database servers, proxy servers, web server, etc.) and PCs. Software licenses must also be bought up-front to allow the use of mail servers and database servers (e.g. Oracle, Visual Studio, etc.). Besides, the normal data center would normally require higher energy to operate it and equipment to control the temperature of the room and to provide ventilation, fire and humidity detection, and cameras to monitor the data center may be required. If this were not enough, there is the added cost of updating the entire data center every 3-5 years. Experts looking into all this stated that the total cost would be very high.

In the case of using the cloud, service providers believe that there will also be savings in the data center architecture as institutions can eliminate the costs. The cloud provider will provide all the services discussed above and the cost will be according to usage. That is, the exact usage will be charged for hourly, monthly or annually depending on the contract.

Some of the experts highlighted that it will require time to build a new infrastructure. A typical hardware procurement can frequently take anywhere between three and four months, and this is without taking into account the effort of various members of the team from IT Director to employees in the sourcing department and so on. One expert commented that the effort of four members for four months is the equivalent of 16 members working for a month. Therefore, proper planning about building a proper cloud, whether it is private or public, can save a lot of effort, time and cost.

Regarding the users of the cloud, they have indicated that using cloud services allows the educational institutions to cut costs on hardware and software. As indicated by users, the cloud eliminates the need for owning and maintaining systems such as the student email system, student information system, learning management system etc.. This is because the cloud service providers are responsible for buying and maintaining hardware, purchasing software, and developing systems.

Cloud service providers did indicate that some on-going costs and operational fees would still depend on the type of service that the institution subscribes to. However, adopting the cloud will definitely save many operational

hassles in maintaining the entire IT infrastructure. The adoption of cloud computing has helped to free up more than half the space in the datacenter, which has also resulted in savings in cooling (heating), and has created substantial reductions in the operational costs such as electricity, support, upgrade and maintenance costs for each of the servers. In addition, cloud providers stated that with the cloud solution the operational cost of connectivity is going to be covered by them.

However, some experts pointed out that in some countries the connectivity is quite poor and expensive. Hence, network connectivity (fiber) is probably the bottleneck to host a DR site. Nevertheless, these concerns will not last forever, as expanding the connectivity is a key demand for any country that wants to cope with the current development.

From the users' point of view, they have agreed that adopting the cloud reduces on-going costs. As an example, cloud licensing (such as MS-Office cloud licensing) is much cheaper than purchasing the physical licensing. In addition, adopting cloud educational packages such as Moodle, allows the users to obtain better service, and still at a lower cost.

Regarding the IT professionals, both providers and experts agree that there will be a straight reduction in the number of resources for operation. The institution will not require a complete operational team to operate and manage the systems because most of the infrastructure and platform-related operations will be done by the cloud team. One expert supported this by estimating the reduction in IT staff as being a possible decrease from ten employees in the normal situation to three when using cloud hosting. These findings support previous research mentioned in the literature (Mircea & Andreescu, 2011), which indicates that with cloud the IT staff can be reduced from fifteen to three.

However, some of the participants pointed out that some IT professionals will still be required to ensure the smooth running of the cloud services. In fact, it is possible to scale down the team size, but their involvement is far greater and requires round-the-clock support to run a decent-sized cloud. It has to be noted that staff with skills to manage virtual machines (VM's), memory, VLAN creations, etc. need to be there in the IT department for effective cloud management.

In addition, providers refer to the wide range of options that the cloud offers as significant in the reduction of cost. The cloud is usually comprised of a self-service portal which enables cloud customers to create, modify or delete a VM on demand. One of the providers supports this point, indicating that the cloud offers the institutions the option of adding a new server (through a website panel) in a few minutes with a certain period of usage that they need, which is referred to as a pay-as-you-use model. Another considerably important option is to choose the exact type of virtual machine and specifications (e.g. RAM, storage, number of processors, etc.) and the price will be decided depending on that choice, and it is usually much cheaper. Payment will be made later, as time passes and resources are consumed.

Moreover, users of the cloud indicate that it provides better facilities at lower cost. By using the cloud, the users are able to utilize IT services anywhere and at any time. As an important point mentioned by the users, the cloud allows the institution to reduce the time required to help in providing better services and greater availability, and increases the total cost of ownership. In addition, the cloud allows the institutions (users) to only own the hardware that enables them to connect to the internet and use the cloud services. This reduction in IT equipment helps the institution to offload maintenance costs (such as the cost of maintaining servers, networks and security appliance hardware etc.).

Regarding Disaster Recovery (DR), service providers widely believe that adopting cloud computing for a disaster recovery is really going to benefit higher educational institutions. As users mentioned, using cloud services for DR would make it cheaper, as it will reduce the number of staff required, and therefore the cost. In addition, cloud service providers run their data centers with high redundancy and availability, making it more reliable and secure to have your environment hosted by them for business continuity. In terms of cost, it all depends on what you need, but usually it will turn out to be much cheaper in the long run, taking everything into consideration.

According to one provider's experience the whole process of setting up the DR site could be carried out in a matter of two days, since establishing DR is easy in a cloud environment, as the VM's can be copied and pasted from the production environment to the DR environment. Similarly the expert opinions match providers' views in that they believe that adopting the cloud for DR will save a great deal of capital investment (CapEX), as in the normal scenario local DR requires a prepared environment which is expensive.

What is more, establishing a testing and development environment with the cloud is much more advantageous

for the institutions. Service providers and experts supported this point and indicated that with the cloud the ability to self-provision development and testing environments will be there. The institutions will develop applications in the cloud without having to bother about software licenses and without even having to own a platform. In addition, before launching the final services they will have the ability to test them in a reliable environment that can handle system crashes or errors rather than testing them locally, which could affect their resources. One of the experts indicated that the cloud allows collaboration with other developers, architects and designers on the development of the application. This way it will reduce the costs for institutions as there will be no need to bring the developers to the country.

5. Conclusion

Cloud computing is a solution for higher educational institutions that suffer from improper infrastructure and/or lack of funds. Cloud computing allows the institution to use IT resources rather than owning them. Cloud computing allows the higher educational institutions to experience cost reduction, flexibility and better services.

This study sets out to explore the financial incentives for higher educational institutions to adopt cloud computing, identifying the cost reductions it will bring. The current findings clarify the difference between cloud-based IT resources and the purchase of in-house IT resources. The most obvious findings to emerge from this study are; (1) cloud computing drives down both up-front and on-going costs; (2) the need for IT staff will be reduced when using the cloud; (3) disaster recovery and business continuity are other cost-savings areas that an educational institute can gain when adopting the cloud and (4) cloud computing provides low cost testing and development environment solutions. Overall, the cloud solution is an opportunity to reduce costs for higher educational institutions, as well as helping them to focus on the core goal.

The obvious recommendation for higher educational institutions is to start experimenting with cloud computing at least on a small scale, in order to fulfill their IT needs and requirements. In order to do this an institution can follow the five step strategy suggested by (Mircea & Andreescu, 2011).

References

- Agarwal, C. (2015). Concepts, Challenges and Opportunities of Cloud Computing for Business Analyst. *AKGEC International Journal of Technology*, 2(2), 28-29.
- Alalwan, A. A., Rana, N. P., Algharabat, R., & Tarhini, A. (2016, September). A Systematic Review of Extant Literature in Social Media in the Marketing Perspective. In *Conference on e-Business, e-Services and e-Society* (pp. 79-89). Springer International Publishing. https://doi.org/10.1007/978-3-319-45234-0_8
- Al-Badi, A. H., AlHinai, Y. S., Sharma, S. K., & Williams, S. (2013). Usage of social networking tools in research and collaboration. *Journal of Emerging Trends in Economics and Management Sciences*, 4(6), 515.
- Alenezi, H., Tarhini, A., & Sharma, S. K. (2015). Development of quantitative model to investigate the strategic relationship between information quality and e-government benefits. *Transforming Government: People, Process and Policy*, 9(3), 324-351. <https://doi.org/10.1108/TG-01-2015-0004>
- Al-Harthy, L. Y., & Al-Badi, A. H. (2014). To Cloudify or Not to Cloudify. World Academy of Science, Engineering and Technology. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 8(8), 2453-2464.
- Al-lawati, A., & Al-Badi, A. H. (2016). The impact of cloud computing IT departments: A case study of Oman's financial institutions. In *International Conference on Big Data and Smart City (ICBDSC), 2016 3rd MEC* (pp. 1-10). IEEE. <https://doi.org/10.1109/ICBDSC.2016.7460344>
- AlKharusi, M. H., & Al-Badi, A. H. (2016). IT personnel perspective of the slow adoption of cloud computing in public sector: Case study in Oman. In *International Conference on Big Data and Smart City (ICBDSC), 2016 3rd MEC* (pp. 1-8). IEEE. <https://doi.org/10.1109/ICBDSC.2016.7460364>
- Alkindi, Z. S., Haynes, J. and Arockiasamy, S., (2015). A Conceptual Architectural Framework of Cloud Computing for Higher Educational Institutions in the Sultanate of Oman. *Journal of Emerging Trends in Computing and Information Sciences*, 6(9), 482-487.
- Al-Mascati, H., & Al-Badi, A. H. (2016). Critical success factors affecting the adoption of cloud computing in oil and gas industry in Oman. In *International Conference on Big Data and Smart City (ICBDSC), 2016 3rd MEC* (pp. 1-7). IEEE. <https://doi.org/10.1109/ICBDSC.2016.7460365>
- Almajali, D. A., Masa'deh, R. E., & Tarhini, A. (2016). Antecedents of ERP systems implementation success: a study on Jordanian healthcare sector. *Journal of Enterprise Information Management*, 29(4), 549-565.

<https://doi.org/10.1108/JEIM-03-2015-0024>

- Al-Qirim, N. (2011). A Roadmap for success in the clouds. In *2011 International Conference on Innovations in Information Technology (IIT)* (pp. 271-275). IEEE. <https://doi.org/10.1109/INNOVATIONS.2011.5893831>
- Al-Qirim, N., Tarhini, A., Rouibah, K., Mohamd, S., Yammahi, A. R., & Yammahi, M. A. (2017). Learning orientations of IT higher education students in UAE University. *Education and Information Technologies*, 1-14.
- Al-Qirim, N., Rouibah, K., Tarhini, A., Serhani, M. A., Yammahi, A. R., & Yammahi, M. A. (2017). Towards a personality understanding of information technology students and their IT learning in UAE university. *Education and Information Technologies*, 1-12.
- AlZadjali, A. M., Al-Badi, A. H., & Ali, S. (2015, September). An Analysis of the Security Threats and Vulnerabilities of Cloud Computing in Oman. In *International Conference on Intelligent Networking and Collaborative Systems (INCOS) 2015* (pp. 423-428). IEEE. <https://doi.org/10.1109/incos.2015.79>
- Anand, H. S. & Kamayani, (2015). Scope of Cloud Computing in Education Sector: A Review. *International Journal of Recent Research Aspects*, 2(2), 150-152.
- Bansal, S., Singh, S. & Kumar, A., (2012). Use of Cloud Computing in Academic Institutions. *International Journal of Computer Science and Technology*, 3(1), 427-429.
- Bucșă, R. C. & Oceanu, L., (2014). Cloud Computing Technology in Educational Institutions. *Economy Transdisciplinarity Cognition*, 17(1), 98-102.
- Carr, N. (2014). *All Things Cloud: Developing an Institution-Wide Strategy*. Jenzabar Inc, NY: USA.
- Chorafas, D. N. (2010). *Cloud computing strategies*. CRC press, NY: USA. <https://doi.org/10.1201/9781439834541>
- Darus, P., Rasli, R. B. M. & Gaminan, N. Z., (2015). A Review on Cloud Computing Implementation in Higher Educational Institutions. *International Journal of Scientific Engineering and Applied Science*, 1(8), 459-465.
- Dwivedi, Y. K., & Mustafee, N. (2010). It's unwritten in the Cloud: the technology enablers for realising the promise of Cloud Computing. *Journal of Enterprise Information Management*, 23(6), 673-679. <https://doi.org/10.1108/17410391011088583>
- Ercan, T., (2010). Effective use of cloud computing in educational institutions. *Procedia Social and Behavioral Sciences*, 2(1), 938-942. <https://doi.org/10.1016/j.sbspro.2010.03.130>
- Erkoç, M. F. & Kert, S. B., (2011). Cloud computing for distributed university campus: A prototype suggestion. In *the proceeding of International Conference on Future of Education*, Firenze (pp 10-17)
- Erl, T., Puttini, R. & Mahmood, Z. (2013). *Cloud Computing: Concepts, Technology & Architecture*. Pearson Education, London, UK.
- Furht, B. and Escalante, A. (2010). *Handbook of cloud computing*. Springer, NY: USA. <https://doi.org/10.1007/978-1-4419-6524-0>
- Hignite, K., Katz, R. N. & Yanosky, R. (2010). *Shaping the higher education cloud*. Educause and Nacubo, Columbia: USA.
- Idowu, S. A. & Osofisan, A. O., (2012). Cloud Computing and Sustainable Development in Higher Education. *Journal of Emerging Trends in Computing and Information Sciences*, 3(11), 1466-1471.
- Kalpeyeva, Z. B. & Mustafina, A. K., (2013). IT-infrastructure of university based on cloud computing. *IJCSI International Journal of Computer Science Issues*, 10(5), 176-179.
- Karajeh, H., Maqableh, M. & Masa'deh, R. (2016). Privacy and Security Issues of Cloud Computing Environment. In *Proceedings of the 23rd IBIMA Conference Vision 2020* (pp. 1-15).
- Karim, F. & Goodwin, R., (2013). Using Cloud Computing in E-learning Systems. *International Journal of Advanced Research Computer Science & Technology (IJARCST)*, 1(1), 65-69.
- Khurana, S., & Verma, A. G., (2013). Comparison of cloud computing service Models: SaaS, PaaS, IaaS. *International Journal of electronIcs & communication technology*, 4(3), 12-27.
- Kovacevic, A. P., Spoljaric, M., & Heđi, I. (2012, June). Cloud-based Collaboration in Higher Education. In *An Enterprise Odyssey. International Conference Proceedings* (pp. 368-389). University of Zagreb, Faculty of

Economics and Business.

- Kumar, S. & Murthy, O., (2013). Cloud Computing for Universities: A Prototype Suggestion and use of Cloud Computing in Academic Institutions. *International Journal of Computer Applications*, 70(14), 1-6. <https://doi.org/10.5120/12027-7633>
- Lakshminarayanan, R., Kumar, B. & Raju, M., (2011). Cloud Computing Benefits for Educational Institutions. In *Second Interenational Conference of the Omani Society for Educational Technology*, Muscat, Oman.
- Mas'adeh, R. (2016). Cloud Computing Perceived Importance in the Middle Eastern Firms: The Cases of Jordan, Saudi Arabia and United Arab Emirates from the Operational Level. *Communications and Network*, 8(03), 103-117. <https://doi.org/10.4236/cn.2016.83011>
- Masa'deh, R. E., Shannak, R., Maqableh, M., & Tarhini, A. (2017). The Impact of Knowledge Management on Job Performance in Higher Education: The Case of the University of Jordan. *Journal of Enterprise Information Management*, 30(2), 244-262.
- Mathew, S., (2012). Implementation of Cloud Computing in Education - A Revolution. *International Journal of Computer Theory and Engineering*, 4 (3), 473-475. <https://doi.org/10.7763/IJCTE.2012.V4.511>
- Maqableh, M., Karajeh, H., & Masa'deh, R. E. (2014). Job Scheduling for Cloud Computing Using Neural Networks. *Communications and Network*, 6(03), 191-200. <https://doi.org/10.4236/cn.2014.63021>
- Mell, P. & Grance, T. (2011). The NIST Definition of Cloud Computing. *National Institute of Standards and Technology* (pp. 1-3.). <https://doi.org/10.6028/nist.sp.800-145>
- Mircea, M. & Andreescu, A. I., (2011). Using Cloud Computing in Higher Education: A Strategy to Improve Agility in the Current Financial Crisis. *Communication of the IBIMA*. 2011, 1-15. <https://doi.org/10.5171/2011.875547>
- Morgado, E. M., (2011). An exploratory essay on Cloud Computing and its Impact on the use of Information and Communication Technologies in Education. *Education in a technological world*, 2(3), 68-71.
- Mylavarapu, V. K., (2011). *Taking testing to the cloud*. Cognizant Reports.
- Nair, S., (2012). Cloud Computing: An Emerging Technology in the Sultanate of Oman. *International journal of advanced research in computer science and software engineering*, 2 (10), 376-380.
- Obeidat, B. Y., Al-Suradi, M., Masa'deh, R. & Tarhini, A. (2016). The impact of knowledge management on innovation: An empirical study on Jordanian consultancy firms. *Management Research Review*, 39(10), 1214-1238. <https://doi.org/10.1108/MRR-09-2015-0214>
- Orozco, J., Tarhini, A., & Tarhini, T. (2015). A framework of IS/business alignment management practices to improve the design of IT Governance architectures. *International Journal of Business and Management*, 10(4), 1-12. <https://doi.org/10.5539/ijbm.v10n4p1>
- Qasim, H., & Abu-Shanab, E. (2014). Cloud computing risks & business adoption. *International Journal of Emerging Sciences*, 4(2), 52-63.
- Rao, C. C., Leelarani, M. & Kumar, Y. R., (2013). Cloud: Computing Services and Deployment Models. *International Journal of Engineering and Computer Science*, 2 (13), 3389-3392.
- Rao, K. S. & Challa, R. K., (2013). Adoption of cloud computing in education and learning. *International Journal of Advanced Research in Computer and Communication Engineering*, 2(10), 4160-4163.
- Rogers, O. & Cliff, D., (2012). A financial brokerage model for cloud computing. *Journal of Cloud Computing*, 1 (1), 1-12. <https://doi.org/10.1186/2192-113x-1-2>
- Saleh, S. K. & Abdalla, A. G. E., (2014). The Role and Benefits of Implementing Cloud Computing System in Sudanese Higher Education Institutions. *International Journal of Computer Engineering and Applications*, 7 (3), 81-87.
- Sharma, S. K., Govindaluri, S. M., Muharrami, S. M., & Tarhini, A. (2017). A multi-analytical model for mobile banking adoption: A developing country perspective. *Review of International Business and Strategy*, 27(1), 1-27.
- Sharma, S. K., Al-Badi, A. H., Govindaluri, S. M., & Al-Kharusi, M. H. (2016). Predicting motivators of cloud computing adoption: A developing country perspective. *Computers in Human Behavior*, 62, 61-69. <https://doi.org/10.1016/j.chb.2016.03.073>

- Shunye, W., Dayong, L. & Zijuan, Z., (2014). E-Learning system architecture based on Private Cloud for university. *Journal of Chemical and Pharmaceutical Research*, 6 (5), 492-498.
- Sinjilawi, Y. K., Al-Nabhan, M. Q., & Abu-Shanab, E. A. (2014). Addressing security and privacy issues in cloud computing. *Journal of Emerging Technologies in Web Intelligence*, 6(2), 192-199. <https://doi.org/10.4304/jetwi.6.2.192-199>
- Singh, A. & Hemalatha, M., (2012). Cloud Computing for Academic Environment. *International Journal of Information and Communication Technology Research*, 2 (2), 97-101.
- Srinivasan, S. (2014). *Cloud Computing Basics*. Springer, NY:USA. <https://doi.org/10.1007/978-1-4614-7699-3>
- Sultan, N. (2010). Cloud computing for education: A new dawn?. *International Journal of Information Management*, 30 (2), 109-116. <https://doi.org/10.1016/j.ijinfomgt.2009.09.004>
- Tarhini, A., Hone, K., & Liu, X. (2014). The effects of individual differences on e-learning users' behaviour in developing countries: A structural equation model. *Computers in Human Behavior*, 41, 153-163. <https://doi.org/10.1016/j.chb.2014.09.020>
- Tarhini, A., Hone, K., & Liu, X. (2015). A cross - cultural examination of the impact of social, organisational and individual factors on educational technology acceptance between British and Lebanese university students. *British Journal of Educational Technology*, 46(4), 739-755. <https://doi.org/10.1111/bjet.12169>
- Tarhini, A., Teo, T., & Tarhini, T. (2016). A cross-cultural validity of the E-learning Acceptance Measure (ElAM) in Lebanon and England: A confirmatory factor analysis. *Education and Information Technologies*, 21(5), 1269-1282. <https://doi.org/10.1007/s10639-015-9381-9>
- Tarhini, A., El-Masri, M., Ali, M., & Serrano, A. (2016). Extending the UTAUT model to understand the customers' acceptance and use of internet banking in Lebanon: A structural equation modeling approach. *Information Technology & People*, 29(4), 830-849. <https://doi.org/10.1108/ITP-02-2014-0034>
- Viswanath, D. K., S.Kusuma & Gupta, S. K., (2012). Cloud Computing Issues and Benefits Modern Education. *Double Blind Peer Reviewed International Research Journal*, 12 (10), 14-20.
- Vitkar, S., (2012). Cloud Based Model for E-Learning in Higher Education. *International Journal of Advanced Engineering Technology*, 3 (4), 38-42.
- Wood, T., Cecchet, E., Ramakrishnan, K., Shenoy, P., Van Der Merwe, J. & Venkataramani, A., (2010). Disaster recovery as a cloud service: Economic benefits & deployment challenges. In *the proceeding of 2nd USENIX Workshop on Hot Topics in Cloud Computing*, Berlin, Germany (pp. 1-7).
- Yadav, K., (2014). Role of Cloud Computing in Education. *International Journal of Innovative Research in Computer and Communication Engineering*, 2 (2), 3108-3112.
- Yadav, N., Khatri, S. & Singh, V. (2014). Developing an intelligent cloud for higher education. *ACM SIGSOFT Software Engineering Notes*, 39 (1), 1-5. <https://doi.org/10.1145/2557833.2557854>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Solving Society's Big Ills, A Small Step

Ravi Kashyap¹

¹ City University of Hong Kong

Correspondence: Ravi Kashyap, City University of Hong Kong. E-mail: ravi.kashyap@stern.nyu.edu

Received: February 13, 2017

Accepted: March 5, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p175

URL: <https://doi.org/10.5539/ass.v13n4p175>

Abstract

We look at a collection of conjectures with the unifying message that smaller social systems, tend to be less complex and can be aligned better, towards fulfilling their intended objectives. We touch upon a framework, referred to as the four pronged approach that can aid the analysis of social systems. The four prongs are:

1. The Uncertainty Principle of the Social Sciences
2. The Objectives of a Social System or the Responsibilities of the Players
3. The Need for Smaller Organizations
4. Redirecting Unintended Outcomes

Smaller organizations mitigating the disruptive effects of corruption is discussed and also the need for organizations, whose objective is to foster the development of other smaller organizations. We consider a way of life, which is about respect for knowledge and a desire to seek it. Knowledge can help eradicate ignorance, but the accumulation of knowledge can lead to overconfidence. Hence it becomes important to instill an attitude that does not knowledge too seriously, along with the thirst for knowledge. All of this is important to create an environment that is conducive for smaller organizations and can be viewed as a natural extension of studies that fall under the wider category of understanding factors and policies aimed at increasing the welfare or well-being to society.

Keywords: Social, Uncertainty, Small, Organization, Solve, Welfare

1. Introduction

“We human beings are social beings. We come into the world as the result of others’ actions. We survive here in dependence on others. Whether we like it or not, there is hardly a moment of our lives when we do not benefit from others’ activities. For this reason, it is hardly surprising that most of our happiness arises in the context of our relationships with others.” - Dalai Lama XIV

“Human beings are social creatures. We are social not just in the trivial sense that we like company, and not just in the obvious sense that we each depend on others. We are social in a more elemental way: simply to exist as a normal human being requires interaction with other people.” - Atul Gawande

Society and the problems facing society then simply become manifestation of the interactions between human beings. These interactions are complex and the complexity increases, the greater the scope of what a social system is trying to accomplish. The greater the number of uncertain human actions that can impact a system, the greater will be the complexity and uncertainty of that social system. The more the participants in a system, the more will be the number of actions and hence the human uncertainty element can be reduced by reducing, the number of humans that can impact that social system. While, natural sources of uncertainty certainly abound and can be extremely impactful, a detailed discussion of those will be postponed for another time.

(Bacharach 1989) sets down a set of ground rules and vocabulary to facilitate focused discussion about the structure of organization and management theories. A matrix of criteria for evaluating the variables, constructs, and relationships that together compose a theory is developed, while distinguishing theory from mere description. The primary goal of a theory is to answer the questions of how, when, and why, unlike the goal of description, which is to answer the question of what.

(Whetten 1989) also goes into the What, How, Why, Who, Where and Whens of a good theory. Any theory theory may be evaluated based on (a) falsifiability and (b) utility. Falsifiability determines whether a theory is

constructed such that empirical refutation is possible. Utility refers to the usefulness of theoretical systems. A theory is useful if it can both explain and predict. (Nagel, 1961; Popper, 1959) have a set of rules for the examination of the constructs and variables which are the units of theoretical statements.

First we start with a conjecture that describes, why we need the main contribution of this paper, a technique for the analysis of social systems, termed, the Four Pronged Approach. As the paper unfolds, it will become clear that the four pronged approach attempts to provide all the elements that any good theory requires and lays down a conceptual framework that can be used to assess the effectiveness of the main points.

The application of this methodology leads to the main proposition of this paper that organizations are becoming more complex and bad outcomes are happening despite the good intentions of the participants involved. The application of this technique provides the conclusion that smaller organization size is the answer to many current social problems. We present a collection of conjectures that illustrate the issues with large organizations and how smaller systems can better cope with these issues. We briefly touch upon ways in which we can move towards smaller systems.

Conjecture 1. *The beauty and also the bane of measurement is that there is always something better or bigger and there is also something worse or smaller.*

This follows partly from the current practice of mapping anything that can be measured to real numbers which are infinite and noting that the universe seems to be infinite and the smallest particle has not been discovered and it has not been proved that there is nothing smaller. This means that there is no absolutely satisfactory answer to the question, how small is small enough? What we can hope to accomplish is establish a relative scale that can show what an optimal size might be for a particular purpose, by looking look at smaller systems and comparing them to larger systems with similar objectives, but yielding dissimilar results. The four pronged approach is one such analysis technique.

We need to consider all the four prongs because the first one tells us about the limitations of any relationships we uncover; the second tells us about the overriding need of any social system and aids in the verification of whether we are deviating from the intended goals; the third tells us that keeping complexity in check is important for accomplishing our objectives. One way for doing that is to have smaller systems with limited scope; and the fourth one tells us where unintended outcomes, that provide no real benefit, can result, despite the care we take to adhere to the stipulations of the first three. Just like the four directions, we need to be aware that there is a degree of interconnectedness in the below four prongs.

1. The Uncertainty Principle of the Social Sciences
2. The Objectives of a Social System or the Responsibilities of the Players
3. The Need for Smaller Organizations
4. Redirecting Unintended Outcomes

Conjecture 2. *The four prongs are like the four directions for an army general looking for victory and any attempt at reform that does not consider all the four prongs will prove to be insufficient and will be incomplete at best.*

The rest of the discussion will substantiate the above claim and its applicability to study social science phenomenon. It is worthwhile to mention here that for most assertions made below, numerous counter examples and alternate hypothesis can be produced. These are strictly attempts at tracing the essentials rather than getting bogged down with a specific instance. However, any study requires forming a conceptual framework based on the more common observations, yet being highly attuned to any specifics that can stray from the usual. Also, for the sake of brevity, a number of finer points have been omitted and certain simplifying assumptions have been made. Given the scope and complications of the below discussion, drawbacks are hard to avoid and future iterations will seek to address these as they are discovered.

2. The Four Pronged Approach

2.1 The Uncertainty Principle of the Social Sciences

Kashyap (2014a) discuss the uncertainty principle of the social sciences, though parts of the discussion are generic, the greater portion centers around, the themes of investing and financial services, paving the way for this present work to consider a broader setting.

Conjecture 3. *The Uncertainty Principle of the Social Sciences can be stated as, “Any generalization in the social sciences cannot be both popular and continue to yield predictions, or in other words, the more popular*

a particular generalization, the less accurate will be the predictions it yields”.

This is because as soon as any generalization and its set of conditions becomes common knowledge, the entry of many participants shifts the equilibrium or the dynamics, such that the generalization no longer applies to the known set of conditions. An observation is likely to be more popular when there are more people comprising that system; and it is important to try and explicitly understand, where possible, how predictions can go awry. Every social system then operates under the overarching reach of this principle.

2.2 The Objectives of a Social System or the Responsibilities of the Players

The ultimate objective of any social system is to maximize well-being. To determine what is intrinsic to wellbeing, requires acknowledging its subjectivity. Layard (2010) talks about surveys in the United States that showed no increase in happiness over the past 60 years, reflecting the fact that higher national income has not brought the better quality of life that many expected. The science of subjective well-being is young, but it is developed enough to know that we need to collect data and make it a prime objective to quantitatively study the determinants of well-being, so that it can be used in policy analysis.

Conjecture 4. *Poverty is a state of mind.*

It is important to gain a more profound, comprehension of welfare and delineate its components into those that result from an increase in goods and services, and hence can be attributed to economic growth, and into those that are not related to economic growth but lead to a better quality of life. The reasoning here being that economic growth alone is an inadequate indicator of well-being. Hand in hand with a better understanding of the characteristics of welfare, comes the need to consider the measures or metrics we currently have that gauge economic growth and supplement those with factors that capture well-being more holistically. This is important because, there would be little sense in pursuing policies aimed at increasing some widely used metric like Gross Domestic Product, GDP, if such policies do not lead to an increase in welfare and worse still, if they lead to an unintentional decrease in well-being; on a lighter note, it is worth pondering about which meaning of gross is applicable in the context of GDP.

There is a compelling case for constructing better metrics to measure welfare. Stiglitz, Sen & Fitoussi (2009) highlighted the deficiencies in existing metrics, encapsulated an agenda for improvements, and discussed key areas on which further research is needed. An alternative to GDP can use variables that show the increase in essentials like food, health care, education, real estate prices, and disposable income. We need metrics that capture not just the increase, but measure the distribution of consumption goods and supplement those with ways that gauge how quality of life improves.

A proxy for quality of life can be captured with variables for: environmental factors relating to air, water, noise pollution; leisure time per day; vacation time; personal safety against crimes and conflicts; social factors like availability of support in case of need; freedom to express oneself and political participation; political stability; and lastly, sustainable ways of production, or having a sustainability index based on depletion of natural resources, which boils down to making sure that what we produce today can continue to be produced with minimal impact to the environment and being able to maintain the current level of well-being for future generations. (Kahneman and Krueger 2006) emphasize the importance of subjective well-being and argue that it is fruitful to distinguish among different conceptions of utility rather than presume to measure a single, unifying concept that motivates all human choices and registers all relevant feelings and experiences.

Conjecture 5. *The question of what is absolutely imperative to lead a good life is a constantly changing one, as luxuries end up becoming necessities.*

This tells us that there can be no absolute measure of well-being. We need to be mindful of the limitations of any static measure and include variables that capture the change in our consumption habits over the years, especially across the constituents of any welfare measure. As we look to analyze the objectives of a social system, we should look beyond measures of how this system contributes to the GDP, but also consider other variables that provide a more complete picture of how this system contributes to welfare.

Social systems can be broadly categorized into those that are profit seeking, we shall refer to them as businesses, and the others that are eleemosynary. We consider the case of the business or the profit-seeking corporation. Friedman (1970) suggests that the social responsibility of business is to increase profits. Recognizing that attributing objectives to any social system is a vague concept, it becomes important to ask precisely, what this implies for whom. The discussion then moves on to the responsibilities of corporate executives, who are expected to make profit maximizing decisions while conforming to the rules of society, embodied in law and ethical custom and stay within the rules of the game. In order to fulfill such an expectation,

Conjecture 6. *It is implicitly assumed that the corporate executive is a philosopher king, a concept dating back to Plato (The republic of Plato), wise enough to know what is right, with the authority to enforce it and the self-control to not abuse his power.*

There is an additional assumption here that the shareholders, whose agent is the executive, are capable of selecting the right person, of monitoring his behavior and taking corrective measures. Surely, that is a tall order in the complex business environment that is today.

The issue of corporate governance is worth a closer look. Shleifer & Vishny (1997) argue that legal protection of investor rights is one essential element of corporate governance. Concentrated ownership, through large share holdings, takeovers, and bank finance, is also a nearly universal method of control that helps investors influence, firm decision making. Although large investors can be effective in solving the agency problem, they may also inefficiently redistribute wealth from other investors to themselves.

Any talk about legal matters is incomplete without a mention of Bastiat's (1968) timeless essay, *The Law*, which suggests the precise limits under which the law has to operate; otherwise, the result would be legalized plunder. The main purpose of law is to render justice, Sandel (2010), illustrates the subjectivity and the subtleties that can arise when dispensing justice.

Conjecture 7. *Even if we take it for granted that the business of a business is simply making more money, and skip the entire debate of whether a firm (and hence the individuals comprising the firm) should identify itself with a more purposeful aspiration, what we can see is that with increasing complexity, it becomes harder to verify whether the goals of the individuals are aligned towards the common objective.*

Grant (1996) identifies the primary role of the firm as integrating the specialist knowledge resident in individuals, into goods and services. The task of coordination, which can be onerous and the possibility of goal conflict are mentioned. The knowledge-based approach offers a theoretical basis for understanding recent organizational trends, including the development of new organizations forms which are more horizontal, with fewer layers, greater empowerment, more team based structures and inter-firm alliances. If the primary resource of the firm is knowledge, if knowledge is owned and can only be exercised by employees, the foundations of a shareholder value approach, with distinct owner and operator, are challenged. This analysis fails to account for is a more comprehensive approach embracing both knowledge creation and application. Also, in larger settings, a specialist centric view could lead to situations, where people successfully try and portray a false image using titles, appearance, and other methods of superficial perceptions reliant signaling (Kashyap, 2010).

Carroll (1991) takes a starkly contrasting view and lists the many social responsibilities of firms in their decreasing order of importance: economic, legal, ethical and philanthropic. He mentions that for such a reality to happen firm executives need to be moral instead of amoral or immoral, which is again a hark back at the need for philosopher kings. Friedman suggests that if shareholder value is maximized, then the shareholders can heed to the call of non-profit generating responsibilities, with their share of the profits. It is easy to see that the common ground for both viewpoints is to have shareholders more involved with firm decisions, which can happen better in smaller, employee owned and operated firms.

Anderson & Warkov (1961) summarize findings from previous studies that assert that growing density of population in a society results in increasingly complex forms of organization and that an increase of size necessitates more complex forms of communication. Some studies claim that, in addition to its effect on organizational complexity growth also brings about a disproportionate increase in the size of the administrative component. Finally, more and more complex tasks may require that the coordination of an organization's differentiated components be accomplished by an increasingly larger administration. By studying the size, complexity and related characteristics of hospitals, they find that: the relative size of the administrative component decreases as the number of persons performing identical tasks in the same place increases (in sharp contrast to other previous studies); the relative size of the administrative component increases as the number of places at which work is performed increases; the relative size of the administrative component increases as the number of tasks performed at the same place increases (or as roles become increasingly specialized and differentiated).

Hall, Johnson & Haas (1967) find that the relationships between size and other structural components are inconsistent, similar to previous research, which utilized size as a major variable. They review other studies that consider the centrality of complexity within organization. Large size is not in itself a critical characteristic of organizations. Rather what appears to be important here is complexity, which is often indicated by size but is quite distinct from it. One way of ascertaining complexity is by measuring the number of occupational specialties and the length of training required by each. The greater the number of occupations and the longer the

period of training required, the more complex the organization. With increased size, the structure of the organization becomes much more complex. The division of labor becomes more differentiated and specialized; more levels of supervision are introduced to maintain coordination and control; and more people become involved in organizational planning. There are wide variations in complexity and it is a structural condition which itself contains a number of components.

Another definition of complexity, which appears to encompass the considerations discussed above, is the degree of internal segmentation, that is, the number of separate "parts" of the organization as reflected by the division of labor, number of hierarchical levels, and the spatial dispersion of the organization. There is a slight tendency for larger organizations to be both more complex and more formalized. More hierarchical levels are found in larger organizations and relatively strong relationships exist between size and the formalization of the authority structure. Their research, which included organizations ranging in size from six members to over 9,000 members, representing a wide range of types, such as educational, commercial, military, governmental, manufacturing, religious, and penal organizations, suggests that size may be rather irrelevant as a factor in determining organizational structure.

Kasarda (1974) examines the structural implications of social system size on three levels of the social system hierarchy: the institutional, the communal, and the societal. He finds that size has a pervasive influence on the internal organization of social systems. Size promotes greater administrative intensity in institutions, communities, and industrialized societies. As social systems expand, substantially greater proportions of their personnel are devoted to communicative or clerical functions. Another inference which may be drawn is that large size promotes an increase in the proportion of professional and technical specialists to handle the additional problems of information gathering, evaluation and planning. Large size does reduce the proportion of managers in an organization; but it raises the relative proportion of other administrative personnel. The result is that the marginal savings in management overhead are exceeded by the marginal costs (in terms of man power) of larger clerical and professional staffs.

Rizzo, House & Lirtzman (1970) find that measures of role ambiguity and conflict within organizations can exist as two separate and independent dimensions, with some correlation in expected directions with other variables of importance to organizations.

Despite the number of interesting studies that have been carried out, it seems to indicate that the results are inconclusive, which is not surprising, given the complexities involved in the study of social systems. These studies can be thought of adding to two viewpoints: one is that with larger systems, complexity increases and a greater proportion of people are necessary to co-ordinate and ensure that the objectives are aligned; the other being that the administrative component does not necessarily increase in proportion to size. The main issue with both these contrasting viewpoints is that the span of control or the sphere of influence of certain people will enlarge and this mushrooming clout can be misused and even if it is not, inadvertent mistakes can have staggering consequences.

Conjecture 8. *It is worth considering whether the complexities of larger systems might itself render such systems beyond the reach of proper analysis and whether the social systems will evolve and change as studies emerge suggesting a particular finding.*

That the uncertainties involved are manifold and they multiply as systems grow is probably the only thing we can be certain about. In the absence of a situation where all the individuals in a social system are righteous, capable of divining the right information and making perfect decisions, it becomes necessary to have smaller organizations, with reduced scope in what they control, so that the effects of mistakes or behavior deviating away from the goals, tends to be restricted.

2.2.1 High Energy Low IQ Syndrome

Conjecture 9. *The wider the set of responsibilities a person faces, the lesser the attention each particular facet gets.*

As an organization gets larger, it is reasonable to assume that more issues will crop up that require resolution by its most capable members. For simplification, here we can assume that capability means depth of thinking that considers an array of possibilities before a decision is made, something that a philosopher King would be suited to do, as we alluded to earlier. We also emphasize that IQ here does not necessarily reflect innate intelligence but is more about the attention span one devotes to solving problems (hence the amount of intelligent thought process). Few of us want to make wrong decisions consciously. It is just situations and role models that bring out the worst in us. Assuming then that the most capable members are at the top levels, where the key decisions are

made, we see that the amount of thought each issue gets will be limited since many issues are bubbling up to the surface. We then see that decision makers need to develop an ability to shuttle between different demands, which by definition is lower IQ.

This leads to the contradiction that the members of the organization that persist in deeply analyzing issues and setting the more appropriate direction forward do not reach the higher levels since they are not displaying the energy or the capacity to multi task among a myriad of concerns. The people that end up at the top would be those that can make superficial, a.k.a quick and dirty, decisions. Situations that are more prone to conflict are discussed later highlighting that sub optimal decisions can be good enough in some cases, as long as their impact is curtailed. Needless to say, this discussion overlooks many things to convey the message that the margin for tolerance is high for most day to day situations, where quick heuristic decisions would be perfectly fine. The incidents that can differentiate good and great decision making are far and few between. But if such situations do arise, with the ever growing size of firms, it is likely that the best decisions makers are not acting on it.

There is the possibility that high energy decision makers rely on high IQ lieutenants for advice. Even after assuming no loss of information or dilution of directives across layers, no conflict of outcomes and hidden agendas (all three are more likely in more complex conflicting environments), various constraints related to chain of command and final authority set in and if differing perspectives exist, it is likely that high energy low IQ decisions might prevail.

2.3 The Need for Smaller Organizations

Diamond (1997) tracing the historical development of the trend towards bigger organizations, supported by bigger communities, leads us to the key stimulus that was the surplus generated by the superior modes of agricultural production. This made possible the establishment of a non-producing class, whose members were crucial for the rapid development of writing, science, cities, technology-based military prowess and formation of states. Dense population centers that could be supported near these lush agricultural centers had a greater exchange of ideas, bringing new innovations into force and also allowing the extraction of rents from a larger number of individuals who came to depend on these new products that were fed by the invention spree.

The blessings of large population centers, on the sciences and the arts, have been tremendous. Development of regions like Silicon Valley in California or Broadway in New York is due to the rapid exchange of ideas. While the benefits of dense populations accrue up to a certain point, the negatives of overcrowding, shortage of resources and diminishing returns set in after a certain stage, giving rise to increasing disparities between the residents in these packed colonies. The widespread use of technology to connect people facilitates interaction among relatively far flung dwellings, removing the need for the congregation of individuals to accelerate the pace of evolution of human civilization.

Damanpour (1996) considers the relationship between innovation and two major indicators of organizational complexity-structural complexity and organizational size. The study finds that the association between structural complexity and innovation depends upon operational definition of complexity, environmental uncertainty, use of manufacturing organizations, use of service organizations, focus on technical innovations, focus on product innovations, and focus on implementation of innovation; and the association between organizational size and innovation depends upon operational definition of size, environmental uncertainty, use of service organizations, use of for-profit organizations, focus on technical innovations, and focus on product innovations.

Busenitz & Barney (1997) examine the differences between entrepreneurs and managers in large organizations with respect to two biases and heuristics: overconfidence (overestimating the probability of being right) and representativeness (the tendency to overgeneralize from a few characteristics or observations). Entrepreneurs and managers think differently, behave differently and utilize heuristics and basis to different degrees. If the use of biases and heuristics are stable over time, then those who are uncomfortable with heuristic based decision-making, on more occasions, will be attracted and selected into larger organizations and vice versa.

Under conditions of environmental uncertainty and complexity, biases and heuristics can be an effective and efficient guide to decision-making. The counter intuitive message here is that larger organizations can give rise to complexity and might in fact require a heuristic approach and be ill-equipped to handle circumstances that require decision making shortcuts, due to the more status-quo loving or risk averse nature of its managers. Whereas the use of cognitive biases may be beneficial and required in some circumstances, it can lead to severe and systematic errors in others.

The implication of this is that large organizations are generally more stable than smaller ones; but the price of failure is greater and hence they are suitable, or perhaps, are more tolerable, only for stable environments and

certain areas of society. If entrepreneurial attitudes and risk taking abound in organizations that can negatively impact the lives of people, it is better to ensure that they are contained in the harm they can do.

Conjecture 10. *Highlighting the greater damage that can result when things go wrong with large systems might seem like a negative threat based approach. The rationale here is that for normal functioning, either small or large can be effective and adequate enough; but when the unexpected happens, the results are more severe and widespread with larger systems.*

Starting with the premise that profit maximization is the driving force of a business, means accepting that a business requires the division of a finite amount of wealth among its participants, a situation inherent with possibilities for conflict. This suggests that it would be prudent to restrict the scope of organizations that require allocation of resources, for which agents do not necessarily have limited desirability (alternately stated as, diminishing marginal utilities won't set in till a very high threshold is reached). Comparing large universities and large businesses should provide more clarity. A business needs to create wealth and share that among its employees. A university needs to create knowledge, which is easier to share than wealth. This leads to the conclusion that universities can be big without giving rise to undue conflicts while businesses need to be smaller.

Porta, Rafael La, et al. (1996) argue that trust is an important ingredient to ensure co-operative behavior. They further mention that while trust might be easier to establish in smaller settings where repeated games can be played that present opportunities to seek corrective actions for previous wrongs, even in larger societies with a greater level of trust, co-operative outcomes can be observed. What this tells us that all else being equal, a smaller setting is better for coordinating efforts.

Smaller size means that it would be easier to check, what, is being done by the institutions and the people involved. We need to look at the argument that if organizations are small, there would be many such institutions and hence many of them to monitor, making it a harder task. But given the reduced scope of smaller organizations, there would be greater transparency, less complexity and a stronger relationship between the service provider and the served.

Conjecture 11. *The smaller size leads to more number of superior quality interactions between the same parties, leading to a repeated game setting, which is known to produce more co-operative behavior. The strengthened relationship effectively acts as an enforcement agent towards both the parties.*

The smaller institution cannot extract large rents for itself, since otherwise it would cease to be competitive against the myriad number of smaller institutions that are available as alternatives and such actions would deter people from doing business with it. The people that are benefiting from the services of an institution would be under close scrutiny from the institution, which bears the burden to ensure that its services are put to the best use possible, since that is integral for its own prosperity. Agents are driven against myopic self-motivated behavior, since maximal benefits accrue by acting with a longer-term vision.

Conjecture 12. *Any set up where the players involved have a fundamental incentive to be on best behavior, functions better than other alternate possibilities. Smaller size reduces complexity in many ways and makes it harder to hide things under the rug.*

This also makes it harder for corruption or other illegal episodes to happen. Systemic failures, wherein most organizations in a sector, are severely affected in a negative way, are less likely, since we have many small organizations and the degree of interconnectedness will be lower that in a set up with a fewer number of organizations.

As organizations grow bigger, a greater share of the individuals that are part of it, become involved in just making sure that the organizations are running smoothly. This takes people away from becoming involved with the actual generation of ideas or producing a tangible output or adding to real growth and welfare. Instead of excessive resource allocation to ensure co-ordination and control, we simply need more transparency, which will result in more fairness and the right thing being done. Honesty is not entirely innate; it can be instilled and it follows from the recognition that human conduct is usually a response to the incentives and the situations. While, formal attempts at tracing the impact of integrity on the functioning of large institutions are worthwhile; a simpler argument, that smaller organizations with less complexity create a better alignment of incentives and situations, and give rise to an environment where it is harder to hide immoral incidents, and foster more righteous behavior, can be shown to hold water.

We could raise the point that the compensation of executives in large organizations can be monitored and going this route would be easier than having to monitor thousands of smaller firms. The rebuttal for this would be that when someone has access to large amounts of money, the chances of misappropriation are higher than when

there is no access to large amounts. The recent financial crisis had instances where large bonuses were paid out even by firms that were receiving bail out funds from the government, under the excuse of retaining talent, among others.

While it is not entirely inappropriate to impose limits on executive compensations, it is highly likely that clever ways to derive excessive compensation will be devised when there is possibility of being able to siphon large amounts of money. This also raises the question of the system of governance. Simply put, this is about whether the state should interfere with the specific of how a firm is run or should the state restrict the main activities of a firm. The next section also considers this in further detail, but without deviating much further from our discussion, we can say that giving the state power over every day affairs can be disastrous.

Conjecture 13. Does size matter? *Does large size lead to stability? Turning to nature again for inspiration, we don't see excessively large organisms, despite some creatures that never stop growing. Similarly, organizations have a tendency to grow. We are a growth obsessed society. A mindset that tolerates the omnipresent stressor of competition and celebrates the birth and death of organizations, helps prevent abnormal growth. The pseudostability of big organizations can cause disasters when they fail, since most systems can cope better with many small continuous demises than a few large sudden deaths. Size does matter.*

There is also the possibility of bigger organizations hiding inefficient parts within themselves by subsidizing their existence. The argument about economies of scale is not as applicable today, because, we use automation and machines to a great extent for agriculture and producing goods. Organizations are knowledge based as opposed to the traditional manufacturing industry, for which such a production term needs to be applied. If organizations are to be small, it is helpful to have a climate that facilitates entrepreneurial activity and allows the easy birth and growth of new businesses.

Acs and Varga (2004) highlight two important proxy measures of the existence of entrepreneurial opportunity, the tendency of people to engage in self-employment and the tendency of people to start new firms. Using data from the Global Entrepreneurship Monitor (GEM) project they examine the relationship between entrepreneurship, knowledge spillovers and economic growth. There are manifold ways to measure entrepreneurial activity. One overbearing dissimilitude is between opportunity-based entrepreneurial activity and necessity-based entrepreneurial activity. Opportunity entrepreneurship represents the voluntary nature of participation and necessity reflecting the individual's perception that such actions presented the best option available for employment, but not necessarily the preferred option. Opportunity entrepreneurship differs from necessity by sector of industry and with respect to growth aspirations. Opportunity entrepreneurs expect their ventures to produce more high growth firms and provide more new jobs. Any gauge of entrepreneurial activity needs to factor in this distinction.

Bockstette, Chanda and Putterman (2002) construct an index that captures the length of state experience. This index is higher for countries that have a longer experience with state-level institutions and such countries have higher political stability, institutional quality and economic growth. It would be advisable to supplement the level of entrepreneurial activity with a measure that captures the depth and history of entrepreneurial culture present in a country.

Beck & Demircug-Kunt (2006) find that small firms face larger growth constraints and have less access to formal sources of external finance, potentially explaining the lack of their contribution to growth. This highlights the issue that larger organizations could crowd out smaller ones, since the pseudo-stability they display, will guzzle away resources from smaller organizations.

Kashyap (2015a) looks at the financial services sector and ways in which the increasing size of financial systems leads to greater profits for the sector at the cost of stability and even perhaps a deviation from the core functions of the sector. While there are numerous ways to monitor and overcome this departure from the intended objectives, a self-reinforcing way that reduces complexity is decreasing the size of financial firms.

Linck, Netter, & Yang (2009) argue that the requirements of the Sarbanes Oxley act have increased the demand and reduce the supply of directors, and there is a potential adverse impact on smaller public firms due to increased compensation burden. The increased monitoring burden imposed upon organizations is working to the detriment of smaller organizations, which might need lesser surveillance than their larger counterparts.

Acs and Varga (2002) hypothesize that any spatialized theory of technology led regional economic growth needs to reflect three fundamental issues. First, it should provide an explanation of why knowledge related economic activities start concentrating in certain regions leaving others relatively underdeveloped; second, it needs to answer the questions of how technological advances occur and what the key processes and institutions involved

are; and third, it has to present an analytical framework in which the role of technological change in regional economic growth is clearly explained.

Beck (2008) mentions that bank size is positively correlated with complexity so that large banks are harder to monitor than small banks. De-Nicolo (2000) argues that bank consolidation is likely to result in an average increase in banks insolvency risk.

This prong is the most important of the four since if we get this right, the reduced size and complexity of any organization or system; helps realize the limitations and aids in the detection of any deviations from the expectations; ensures that the responsibilities and incentives of the parties involved are aligned and continue to stay aligned with the original targets; and makes it easier to ascertain the unintended consequences of any efforts, which are hard to completely eliminate, as we will see in the next section.

2.3.1 Organizations as an Amalgamation of Lego Blocks

Conjecture 14. *We are building increasingly complex organizations and we are using increasingly complex methodologies to study them. The complex methodologies are just rearrangements of simpler rules just as complex organizations are aggregations of simpler blocks.*

This suggests that the smaller the bunch of Lego blocks (Endnote 1) used, the easier will it be to understand any structure that results from combining them.

2.4 Redirecting Unintended Outcomes

Paiche and Sterman (1992) inquire into decision making in complex environments and conduct an experiment where subjects must manage a new product from launch through maturity, and make pricing and capacity decisions. Building upon previous studies, they demonstrate that decision making in complex dynamic environments tends to be flawed in specific ways by not accounting sufficiently for feedback loops, time delays and nonlinearities. Even with a decent amount of experience, there is no evidence that environments with high feedback complexity can produce improved decision making ability. Poor decision making in complex production systems can create pervasive booms and busts, where new products can have exponential sales increases, fueling rapid growth, often leading to overcapacity, price wars, and bankruptcy.

Pollay (1986) reviews theories about advertising's social and cultural consequences. Advertising is viewed as intrusive and environmental and its effects as inescapable and profound. Advertising is seen as reinforcing materialism, cynicism, irrationality, selfishness, anxiety, social competitiveness, sexual preoccupation, powerlessness, and/or a loss of self-respect.

Kashyap (2015b, 2015c) looks at unintended consequences as it applies to the financial services industry and the difficulties in being able to anticipate the outcomes of complex systems. Norton (2002) mentions the law of unintended consequences, as often cited but rarely defined, as actions of people -and especially of government- always have effects that are unanticipated or unintended. Building on the work of others, primarily, Merton (1936), the discussion labels various sources of such unintended consequences: ignorance, error, instances where individuals want the intended consequences so badly they choose to ignore any unintended effects and self-defeating predictions where the public prediction of a social development proves false precisely because the prediction changes the course of history. Government attempts at reform have the largest scope and hence perhaps the actions of the government and politicians are alluded to directly in the article.

Ash, Berg & Coiera (2004) outline a number of issues within a framework describing two major kinds of silent errors caused by health care information systems: those related to entering and retrieving information and those related to communication and coordination. The potential causes of these errors are subtle but insidious. They argue that many of these errors are the result of highly specific failures in patient care information system design and/or implementation. They do not focus on errors that are the result of faulty programming or other technical dysfunctions. Hardware problems and software bugs are more common than they should be, especially in a high-risk field such as medicine.

However, these problems are well known and can theoretically be dealt with thorough testing before implementation. Similarly, they do not discuss errors that are the result of obvious individual or organizational dysfunction such as a physician refusing to seek information in the computer system, 'because that is not his task, or a health care delivery organization cutting training programs for a new information system for budgetary reasons. They focus on those often latent or silent errors that are the result of a mismatch between the functioning of the information system and the real-life demands of health care work. Such errors are not easily found by a technical analysis of the system design, or even suspected after the first encounter with the system in use. They can only emerge when the technical system is embedded into a working organization and can vary

from one organization to the next.

Schoorman (1988) examines the tendency of supervisors to escalate their commitment of a previously expressed opinion by biasing performance ratings in the context of a real organization. There was strong support in the study for two hypotheses: (a) that supervisors who participate in a hiring or promotion decision and agree with the eventual decision would positively bias subsequent performance appraisal ratings for that employee; and (b) that supervisors who participate in the original decision but disagree with the decision would bias subsequent performance appraisal ratings in a negative direction.

Cornelius (2001) assesses the efficacy of the strategy of immigration control implemented by the US government since 1993 in reducing illegal entry attempts, and documents some of the unintended consequences of this strategy, especially a sharp increase in mortality among unauthorized migrants along certain segments of the Mexico-US border. The available data suggest that the current strategy of border enforcement has resulted in re-channeling flows of unauthorized migrants to more hazardous areas, raising fees charged by people-smugglers, and discouraging unauthorized migrants already in the US from returning to their places of origin. However, there is no evidence that the strategy is deterring or preventing significant numbers of new illegal entries, particularly given the absence of a serious effort to curtail employment of unauthorized migrants through work-site enforcement.

The Sweeney and Sweeney (1977) anecdote about the Capitol Hill baby-sitting crisis expounds the mechanics of inflation, setting interest rates and monetary policies required to police the optimum amount of money. The creation of a monetary crisis in a small simple environment of good hearted people expounds that even with near ideal conditions, things can become messy; then in a large labyrinthine atmosphere, disaster could be brewing without getting noticed and can strike without much premonition. This emphasizes the need to keep complexity at bay and establishing an ambience where repeated games can be played with public transparency, so that guileful practices can be curtailed.

All of this tells us that intended outcomes could churn out negative side effects and the reverse could happen as well. But to create a robust society we need to minimize the impact of the downfall. The topic discussed earlier about having better metrics to measure welfare would be helpful to identify unintended outcomes.

If governments or any organizations start intervening to set strict limits on production, on the amount and manner in which people consume and live, the results could be catastrophic and lead to too much state control or to socialism or even communism. (Hayek, 2009; Marx, Engels, 1959; are seminal works). The other extreme to this is completely free markets, or capitalism, which as we are realizing will lead to huge inequalities in society. While it is hard to draw a strict line between these two modes of governance, we need elements from both models of governance and economic policy. Our earlier discussion on the advantages of smaller size firms applies here, wherein, with the prevalence of smaller organizations, incentives would be aligned such that it becomes easier to spot wrongful conduct, leading to better governance with lesser monitoring.

3. Discussion

3.1 Small Business as a Solution to Corruption.

When power and wealth are concentrated in the hands of a few, it usually leads to corruption and exploitation of the masses by a few. This is inevitable and follows from human nature and the seductive allure of power. While taming human nature is possible, let us leave that out for now since it is a somewhat arduous task that could span generations.

Every attempt at social reform has been to address this issue. This exploitation of the masses by a few happens, in the extreme case, even with both the two leading models of society and governance namely, Socialism and Capitalism. A more practical and immediate solution lies in ensuring that the basic needs of any individual are met and he/she has a safety net that ensures a certain minimal standard of living. When survival becomes easy, people will not give in easily to exploitation. This can happen through a grassroots movement by ensuring that small businesses and mid-size businesses thrive and the barriers to entry for such new organizations in an economy are minimal to non-existent.

When many such small organizations succeed and new ones can crop up easily, power tends to get less concentrated and therein lies the true solution to the many ills faced by any society. Having said this, we do not mean that we should not say anything against corruption or other ills. In fact, any effort by any individual against corruption or the like should be commended and any such effort is certainly not in vain. But what we really need to understand is that we need to support organizations that help small businesses grow and thrive. This is what the Great Mahatma Gandhi also stressed in his vision of every village meeting its needs indigenously through

small scale industry. This can apply to all countries around the globe even though there are varying levels of corruption and other cultural nuances.

A simple analogy is when a person is very sick, medicines help, but what is needed longer term are better diet, exercise and living conditions. Same goes with creating more rules and protests, they are helpful temporarily but what is needed longer term is an environment where individuals can establish self-sufficiency easily thereby reducing the chance for them to get exploited. When this happens, the common man is less dependent on the Government and other large organizations, such organizations will have less power making it more difficult to be corrupt or abusive.

Surely, this perfect recipe for a smooth functioning society is easier said than done. Most would easily see that the simplification in this narrative is for the brevity that is essential in any call for action, which in this case, is for individuals and organizations to realize the need to promote small and medium enterprises, their responsibility in making this happen and the benefits that will accrue to them once this starts happening. As with any daunting challenge, there will be opposition from certain incumbents that stand to lose the most with the added risk that success might seem completely elusive or become available in small unsatisfying doses for a long time, there is simply no excuse for not trying.

While this might seem like an attempt to change the world, it is sheer arrogance, possibly bordering stupidity, to think we can change the world that has existed for millions if not billions of years in our blink of a lifetime. The simple belief espoused here is that promoting small-biz is one way to make life in a society a fun ride for a lot of people. The other option might, of course, be to resurrect the psychedelic 60's, the hippie lifestyle and the blissful ignorance of LSD, all of which is neither recommended nor disapproved.

3.2 The Existential Question!!!

Why do we need organizations that aid the development of smaller organizations and businesses? The one sentence that can answer this question is,

Conjecture 15. "Necessity is the mother of all creation, but the father that is often forgotten is frustration. . . "

It is necessary for organizations, which are seeking to help small businesses flourish, to exist. The earlier section on 'Small-Biz as a Solution to Corruption' has a more detailed explanation of this necessity. While that is the necessary part, the frustration that should bring about such organizations is the increasing explosion of information, jargon and the deception of society by the so-called experts. We mean no disrespect to any experts who have spent many years working in a field. We definitely include people doing Research and Development in the expert category. We as a society, clearly need both. There is also much to be said about the instincts that people tend to develop when they engage in a certain behavior for long periods of time. But, what we need to realize is that in most situations that do not warrant a highly specialized outlook, we value expert opinions a lot more, even though they may not really be all that better than the opinions of an average person.

It is common to fear darkness and look towards the light and hence the nexus to Diwali, the festival of lights, as illuminated by the following metaphor. As we celebrate the festival of lights, it is worth pondering about one interpretation of light, which stands for knowledge that dispels darkness, which is representative of both ignorance and over confidence.

Needless to say, we need to mitigate this two-sided problem, where on one side we know nothing of too many things and on the other side, we feel we know everything about some other things, by spreading knowledge about varied concepts and by demonstrating the limitations of whatever we know.

Summing it up, we need organizations to promote small businesses and continuously educate people. This relates to the earlier discussion of the central functions of organizations, which is the creation and application of knowledge to solve the problems facing society. While it is hard to draw a strict boundary between the two streams, gaining knowledge can represent efforts at creating and disseminating interesting thoughts, and problem solving could be the work done with small businesses in resolving their concerns.

In Conclusion, Organizations like the one above need to exist, in this information age, to try to uncover nuggets of knowledge amidst buckets of B.S (Endnote 2).

3.3 A Way of Life

Why stop at the organization level, when a culture that is constantly involved in gaining knowledge and applying this knowledge to solving problems can be a beneficial lifestyle. Gaining knowledge and solving problems need not be a trade, but it can simply be something people enjoy doing; leading to the motto, Not just a business, but a way of life.

What other values would be compatible with such a tradition? Such a heritage would challenge conventional thinking by claiming that most complexity is the result of viewing the world from a highly specialized point of view and the increased use of unnecessary jargon. It would continuously strive to find common elements among various seemingly unrelated disciplines. This would be done, while being fully aware that all situations have certain unique elements to them and that recognizing this is the key to arriving at a more comprehensive resolution of problems. Years of experience are not useless. Previous experience can be extremely valuable, but only when used where it is really needed. Respect for every bit of knowledge gained from every possible source is important; what is more important is an attitude that does not take this knowledge too seriously. This would mean gaining knowledge, so we can forget all about it when we have to and recollecting knowledge from a myriad of sources when we want to. If this sounds confusing, congratulations, this is the right track; confusion is the beginning of understanding.

This lifestyle would seek to help all kinds of organizations by advocating a somewhat unique approach to problem solving. When organizations realize they are facing some issues, they look for people either internally or externally who can solve it.

Conjecture 16. *A lot of times, the main issue about the issue is that it is not clear what the real issue is.*

The reason for this is very simple, when an issue is identified, it is either done by someone who does not have the time to solve it or does not know how to solve it or simply does not want to deal with it themselves. This could very well be due to the many valid constraints they face in their current organization. So they make their best effort to isolate the issue. Then, what is usually done is the issue is bucketed into a few standard categories. Then an expert in that category is brought in to take care of it. The expert here is someone who has dealt with similar issues many times before and has experience dealing with such problems for a number of years.

Conjecture 17. *So at this point, we are not sure what the issue is and we have an expert on this issue looking at it.*

When we talk about experience over a number of years in the conventional sense, it does lead to expertise and specialization. This means when a specialist is looking at a problem, he/she is looking at it in one way, identical to an approach he might have used before, and might provide a solution quite similar to previous situations that might have some common elements to the current problem. This happens in a lot of organizations, a lot of times. The specialist has the advantage of being the most knowledgeable person in the initial diagnosis phase and hence someone who is not a specialist does not seem to add much value in the initial phase and the opinions of few such non-experts get serious consideration in this initial phase. We might have seen this play out many times before in almost any organization we have been part of. The good part is that this problem can be solved with a certain way of problem solving.

Dealing with problems differently is an attitude, a frame of mind. We mean no disrespect to people who are passionate about something and spend years pursuing it. But, the nature of the issue we are facing is such that, in many situations that do not require a lot of expertise, we value the opinions of experts, even though it might not contribute anything materially significant. We can have a bright high school student, talk as intelligently about the economy, as an economist, who has been doing this for two decades. The same goes with say, an expert in marketing, accounting, law or a number of other disciplines. (While it is tempting to generalize this and say that with the right amount of training, this applies to almost every discipline; we steer away from doing that here.) There is also an element here about how luck is important and this can be a long discussion and we will leave it out for now.

The takeaway from this is that people overestimate the amount of additional knowledge that expert's possess. The bias that forms naturally, when experience is used to solve problems, gets overlooked. Having said that: when looking at a problem, it is not just helpful but absolutely essential, to not muddy the issue too much with our previous experience. This does not mean that we have to leave out experts from our teams. It is certainly important to draw lessons from previous situations, to work with many experts and solicit their advice. But in the initial phase, we should try to get as many contrasting opinions out on the table as possible. We should also try to find common elements between a particular problem, and say some other problems the organization might be facing in other related divisions or groups. Easy as this might sound, to fully get a team working like this, takes training and a great deal of modesty from the members of the team. To be able to accomplish this requires the right approach to problem solving and continuous honing of those skills. This way of Problem Solving provides better satisfaction for all the stakeholders.

It is worthwhile to mention the kind of persons to keep company with, to promote this lifestyle. It would be someone who knows not to take their experience as their greatest asset. The first thing to learn is to be able to

drop our baggage of experience at the door step before looking at any problem. A fresh perspective and untainted observation should form the basis of getting trained to diagnose any situation. Next, it is about learning to apply the knowledge gained from sources as obscure as watching a clown perform, in a busy Paris street or a day spent on an African Safari to the problem at hand. It is a constant involvement in gaining knowledge and questioning what we learn. This critical evaluation of knowledge helps to find patterns that are otherwise not easily noticed. It is more than surprising, when one discovers how things are interrelated and the subsequent "aha" moment that comes about when we uncover these relationships. It is important to be extremely organized in our thoughts and efforts; but given what has been discussed, there is no standard life cycle or project plan that will apply and we can follow. We need to observe and take detailed notes in this first phase of analysis. This makes the initial phase of any project the hardest phase.

Another example of this thinking paradigm would be, people in the operations or the inventory management department should not just be involved but they should understand all aspects of developing new products in the product development group. The common complaint to this is that with only 24 hours in a day, and less than half of that devoted to work, someone in operations does not have the time to learn about new products. There is a simple and effective solution to this. When new projects are started, in the initial phase, it becomes necessary to demonstrate how cross departmental understanding can be achieved with very minimal time consumption when the key stakeholders are incentivized to understand the importance and made to participate in such efforts.

This leads to the most important aspect of how to tackle new issues - Teamwork. The central belief for team work to work is: what one person can do, two or more people can do better. Teams need to be structured around this belief. Individuals that have dealt with problems similar to the ones being faced need to be teamed with people with expertise in other areas. The instincts of the expert coupled with the fresh perspective of the so called non-expert will ensure that no stone is left unturned in looking for solutions. Being effective problem solvers means taking on different roles from being a sounding board, to acting as coaches, to performing complete hands on implementations, as the particular case may require. What is important is a desire to get the most things done. This approach might pleasantly surprise everyone involved, at how much more can be accomplished than was initially thought possible. The result is what we can term "A Fundamental & Original Approach to Problem Solving".

Tying the discussion back to the central tenet of the paper and the arguments put forth earlier, we can surmise that the way of life discussed here is easier to follow when organizations are smaller. Corruption will be less and objectives of the players are aligned with the intended outcomes.

4. The Path Ahead

The core theme we have proposed is that organizations need to be small. This opens up a number of questions, to which we provide partial answers here, and point out that much further thought and work is required to more satisfactorily assuage these objections.

How small is too small or how big is still too big? While on the surface, not knowing the answer to this question might seem like a show stopper for tangible action. As alluded to, in the introduction; a relative scale in terms of what size works for what purpose, is what we can hope to accomplish. The four pronged analysis technique can help reveal where size is hampering the objectives of any particular social system.

What are some ways to ensure organizations become small and stay small? How can we transform society in its current state with large organizations to a state with smaller organizations painlessly or with minimum negative consequences? How do we suppress the natural urge and desire we (including owners and managers of organizations) have to grow our organizations? What are the implications of smaller size for huge multinational organizations and the area of international trade and finance? Is there really a stability that comes from size or will the birth and death of organizations of smaller organizations be accepted such that there will be a realization that larger size only gives pseudo stability? This brings up the subject of regulation and the limitations of regulation, not to mention, the unintended consequences that always creep in along with the intended ones. While not attempting to have some regulation in place would be unwise, any attempt at regulatory change is best exemplified by the story of Sergey Bubka (Endnote 3), the Russian pole vault jumper, who broke the world record 35 times. Attempts at regulatory change can be compared to taking the bar higher. Despite all the uncertainty, we can be certain of one thing, that people will find some way over the intended consequences, prompting another round of rule revisions, or raising the bar, if you will. What would work better in the long run is a cultural mindset that takes smaller size as a blessing and worships the entrepreneurial spirit that can continuously churn out smaller organizations.

The excellent reference by Creswell, J. W. (2013) has pointers on how some of the above discussion can be

shaped further using a mixed methods approach, that is a mixture of both quantitative metrics, supplemented with qualitative insights.

4.1 The Compensation Ratio Test

Conjecture 18. *The ratio of the highest and lowest compensation levels in an organization should not be greater than a certain factor.*

As organizations age, the ratio should get smaller which incentivizes newer organizations to start up. The ratio factor though seemingly ambiguous can be related to the amount of wealth at the disposal of the organization or the community it is part of and the corresponding population (Kashyap 2016b). Such an approach could potentially lead to an extreme situation where only a small percent of the population will be employed and controls most of the resources. Another potential issue is that a temporary workforce could be used and profits could be deferred after the work force has been trimmed. This again highlights the issue that clever workarounds are always possible, so keeping organization small and simple should be the real objective.

Tax breaks for smaller firms, breaking up big companies on antitrust grounds, greater blocks on merger activity and other manners of enforcement can and should be employed but they will be less effective since they are external to the organization. The compensation ratio is an internal factor, constantly at work monitoring the proceedings, resulting in a greater chance of success.

4.2 Final Thoughts

If organizations end up becoming small, will this affect the progress we have seen in society due to the various contributions from the arrangement and synchronization of resources and efforts on a massive scale? Businesses are needed to channel resources efficiently and ensure that freeloading is minimized. While conceding that the maxim of profit maximization is a necessary evil for now, the great strides that civilization has taken, lends hope that perhaps some day agents will not require a driving force to ensure that they reach their productive best and perhaps passion alone can propel us forward. Till we reach such a Utopian reality, we need businesses and we need to make sure they are small.

An extreme situation that needs evaluation is whether we would be a deprived society without the large scale alignment of efforts and production. An example here, inspired by nature, is that of honey bees (Winston, 1991; Seeley 2009). To survive and get through the harsh winter, requires co-ordination from a huge number of worker bees and a tight knit community to collect nectar from far flung flower sources. A handful of bees would perhaps not function as effectively, as a typical hive that can have 20,000 all the way up to 200,000 individual bees, in protecting their homes and gathering sufficient food. To facilitate this high degree of co-ordination among many individuals, bees have specialized functions determined right at the biological level complemented with a sophisticated communication mechanism.

Bhargava (1989) and Bühler (1886) discuss historical precedents where society was grouped into divisions and specific functions were adopted by individuals in each group. Huxley (2007) narrates an illustrative story of a utopia in a futuristic fictional setting, where professions are determined right at birth. These examples seem to highlight that unless there are rigid restrictions on roles and responsibilities, which are enforced either biologically or made culturally prevalent, massive co-ordination might be harder to accomplish. Modern technology has provided us with ample methods of effective communication and with better means of communication; the optimal size might also increase.

Doidge (2007) presents classic cases from the frontiers of neuroscience that chronicle the biological changes happening in the brain driven by external impetuses, revealing that adapting to new circumstances and learning to deal with adversity are almost hard wired into us. In essence what they reveal is that the brain constantly changes as situations change. (McDonald & Tang, 2014) look at research from the interdisciplinary field of social cognitive neuroscience that provides insights as to how managers learn and develop, resulting in theoretical propositions and practical implications. Neuroscience offers potential to theoretically advance our understanding of management development as well as practically enhance managerial capacity to (a) reflect with a deeper sense of self-awareness, (b) analyze with greater balance across hard and soft data, (c) position organizations within broader perspectives, (d) collaborate inter-personally by establishing relationships that engender egalitarianism and trust, and (e) enact change in a nonlinear manner. This avenue of research holds a lot of promise.

Surely it is a big ask that we solve all of society's problems completely with one magic bullet. What we can realistically hope as a starting point is at least a consensus as to which direction society should move towards, for there to be better living conditions, which we can argue is the main objective of society. If we are conceptually in

agreement that small is the sensible way forward, despite what the answers to the other questions may be, we know in which direction we should proceed. This means putting aside for the moment, the wonderful advice of (Daft 1985) of mixing a theoretical approach with empirical aspects in one paper to make it convincing for reviewers and editors, in favor of a purely conceptual paper since; if we know what needs to be done, how to do it becomes secondary since the many different ways to accomplish something will lead to the same final outcome. Any situation that requires co-ordinated efforts to shape and share limited resources can produce conflict and in such situations complexity needs to be reduced and the scope of conflict needs to be minimized, by having smaller organizations.

Given the breadth of the hypothesis, mistakes are hard to avoid, much further research and numerous revisions will need to be made to answer, augment, modify and amplify these questions.

5. Conclusion

We looked at several examples that have intuitively substantiated the coherence of the four pronged approach. By considering each prong in isolation and then finally integrating the findings, we hope to establish different aspects of what would be crucial to increasing welfare and also what would be the limitations of any such recommendation. By recognizing the gap that exists between the fundamentals that drive the behavior of individuals or institutions, and the expected outcomes from their actions, we hope to highlight how it becomes relatively straight forward to set incentives that can maximize welfare.

If we start by reducing the size of institutions, it becomes easier to monitor them and a certain level of self-governance is also put into place. The other prongs then follow somewhat naturally and where there are deviations from what is desired, the reduced complexity, allows corrective mechanisms to be administered with less effort. Highlighting the greater damage that can result when things go wrong with large systems might seem like a negative threat based approach. The central argument is that for normal functioning, either small or large can be effective and adequate enough; but when the unexpected happens, the results are more severe and widespread with larger systems.

An issue specific to today's society, corruption, was discussed. We considered why it would be useful to have organizations that would nurture other smaller organizations. Lastly, we looked at a way of life involving a quest for knowledge and applying it to solve problems facing society, while being cognizant of the limitations of knowledge. Such a way of life works best when organizations are less complex.

The dynamic nature of any social science system means that the limited predictive ability of any awareness will necessitate periodic reviews and programs then need to be prescribed in response to what is required. We certainly hope that this work will subsequently set the stage for an investigative methodology using the four pronged approach.

Notes and References

1. Lego Blocks Lego Blocks: <https://en.wikipedia.org/wiki/Lego>
2. B.S. stands for Bullshit, BS: <http://en.wikipedia.org/wiki/Bullshit>
3. Sergey Bubka Sergey Bubka: http://en.wikipedia.org/wiki/Sergey_Bubka
4. Acs, Z. J., & Varga, A. (2005). Entrepreneurship, agglomeration and technological change. *Small Business Economics*, 24(3), 323-334. <https://doi.org/10.1007/s11187-005-1998-4>
5. Acs, Z. J., & Varga, A. (2002). Geography, endogenous growth, and innovation. *International Regional Science Review*, 25(1), 132-148. <https://doi.org/10.1177/016001702762039484>
6. Anderson, T. R., & Warkov, S. (1961). Organizational size and functional complexity: a study of administration in hospitals. *American Sociological Review*, 23-28. <https://doi.org/10.2307/2090509>
7. Ash, J. S., Berg, M., & Coiera, E. (2004). Some unintended consequences of information technology in health care. *Journal of the American Medical Informatics Association*, 11(2).
8. Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *Academy of management review*, 14(4), 496-515.
9. Bastiat, F. (1968). *The law*. Laissez Faire Books.
10. Beck, T. (2008). Bank competition and financial stability: friends or foes?. *World Bank Policy Research Working Paper Series*. <https://doi.org/10.1596/1813-9450-4656>
11. Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth

- constraint. *Journal of Banking & Finance*, 30(11), 2931-2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
12. Bhargava, D. (1989). *Manu Smriti: A Sociological Analysis*. Rawat Publications.
 13. Bockstette, V., Chanda, A., & Putterman, L. (2002). States and markets: The advantage of an early start. *Journal of Economic Growth*, 7(4), 347-369. <https://doi.org/10.1023/A:1020827801137>
 14. Bühler, G. (Ed.). (1886). *The laws of Manu* (Vol. 25). Clarendon Press.
 15. Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases & heuristics in decision-making. *Journal of business venturing*. [https://doi.org/10.1016/S0883-9026\(96\)00003-1](https://doi.org/10.1016/S0883-9026(96)00003-1)
 16. Carroll, A. B. (1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business horizons*, 34(4), 39-48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G)
 17. Cornelius, W. A. (2001). Death at the border: Efficacy and unintended consequences of US immigration control policy. *Population and development review*, 27(4), 661-685. <https://doi.org/10.1111/j.1728-4457.2001.00661.x>
 18. Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
 19. Daft, R. L. (1985). Why I recommended that your manuscript be rejected and what you can do about it. *Publishing in the organizational sciences*, 193-209.
 20. Damanpour, F. (1996). Organizational complexity and innovation: developing and testing multiple contingency models. *Management science*, 42(5), 693-716. <https://doi.org/10.1287/mnsc.42.5.693>
 21. De Nicolo, G. (2001, April). Size, charter value and risk in banking: An international perspective. In EFA 2001 Barcelona Meetings.
 22. Doidge, N. (2007). *The brain that changes itself: stories of personal triumph from the frontiers of brain science*/Norman.
 23. Diamond, J. (1999). *Guns, germs, and steel: The fates of human societies*. WW Norton & Company.
 24. Friedman, M. (1970). The Social Responsibility of Business is to Increase its Profits.
 25. Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, 17, 109-122. <https://doi.org/10.1002/smj.4250171110>
 26. Hall, R. H., Johnson, N. J., & Haas, J. E. (1967). Organizational size, complexity, and formalization. *American Sociological Review*, 903-912. <https://doi.org/10.2307/2092844>
 27. Hayek, F. A. (2009). *The Road to Serfdom*. University of Chicago Press.
 28. Huxley, A. (2007). *Brave new world*. Ernst Klett Sprachen.
 29. Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. *The journal of economic perspectives*, 20(1), 3-24. <https://doi.org/10.1257/089533006776526030>
 30. Kasarda, J. D. (1974). The structural implications of social system size: A three-level analysis. *American Sociological Review*, 19-28. <https://doi.org/10.2307/2094273>
 31. Kashyap, R. (2010). *Go Bald and Get Gold in Business*. Working Paper. <https://doi.org/10.2139/ssrn.2338390>
 32. Kashyap, R. (2014a). Dynamic Multi-Factor Bid-Offer Adjustment Model. *The Journal of Trading*, 9(3), 42-55. <https://doi.org/10.3905/jot.2014.9.3.042>
 33. Kashyap, R. (2015a). Financial Services, Economic Growth and Well-Being. *Indian Journal of Finance*, 9(1), 9-22. <https://doi.org/10.17010/ijf/2015/v9i1/71531>
 34. Kashyap, R. (2015b). A Tale of Two Consequences. *The Journal of Trading*, 10(4), 51-95. <https://doi.org/10.3905/jot.2015.10.4.051>
 35. Kashyap, R. (2016). Hong Kong - Shanghai Connect / Hong Kong - Beijing Disconnect (?), Scaling the Great Wall of Chinese Securities Trading Costs. *The Journal of Trading*, 11(3), 81-134. <https://doi.org/10.3905/jot.2016.11.3.081>

36. Kashyap, R. (2016b). *A Simple Model of Organizational Size and Complexity*. Working Paper.
37. Layard, R. (2010). Measuring subjective well-being. *Science*, 327(5965), 534-535. <https://doi.org/10.1126/science.1186315>
38. Linck, J. S., Netter, J. M., & Yang, T. (2009). The effects and unintended consequences of the Sarbanes-Oxley Act on the supply and demand for directors. *Review of Financial Studies*, 22(8). <https://doi.org/10.1093/rfs/hhn084>
39. McDonald, P., & Tang, Y. Y. (2014). *Neuroscientific Insights into Management Development Theoretical Propositions and Practical Implications*. Group & Organization Management. <https://doi.org/10.1177/1059601114550712>
40. Marx, K., & Engels, F. (1959). *The communist manifesto* (Vol. 6008). eBookEden. com.
41. Merton, R. K. (1936). The unanticipated consequences of purposive social action. *American sociological review*, 1(6), 894-904. <https://doi.org/10.2307/2084615>
42. Nagel, E. (1961). *The structure of science: Problems in the logic of scientific explanation*.
43. Norton, R. (2002). Unintended consequences. The Concise Encyclopedia of Economics.
44. Paich, M., & Sterman, J. D. (1993). Boom, bust, and failures to learn in experimental markets. *Management Science*, 39(12), 1439-1458. <https://doi.org/10.1287/mnsc.39.12.1439>
45. Plato. (1945). *The republic of Plato* (Vol. 30, pp. 175-203). New York: Oxford University Press.
46. Pollay, R. W. (1986). The distorted mirror: Reflections on the unintended consequences of advertising. *Journal of marketing*, 50(2), 18-36. <https://doi.org/10.2307/1251597>
47. Porta, R. L., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. W. (1996). *Trust in large organizations* (No. w5864). National Bureau of Economic Research. <https://doi.org/10.3386/w5864>
48. Popper, K. R. (2002). *The poverty of historicism*. Psychology Press.
49. Popper, K. R. (1959). *The logic of scientific discovery*. London: Hutchinson.
50. Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative science quarterly*, 150-163. <https://doi.org/10.2307/2391486>
51. Sandel, M. J. (2010). *Justice: What's the right thing to do?*. Macmillan.
52. Schoorman, F. D. (1988). Escalation bias in performance appraisals: An unintended consequence of supervisor participation in hiring decisions. *Journal of Applied Psychology*, 73(1), 58. <https://doi.org/10.1037/0021-9010.73.1.58>
53. Seeley, T. D. (2009). *The wisdom of the hive: the social physiology of honey bee colonies*. Harvard University Press.
54. Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783. <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>
55. Stiglitz, J., Sen, A., & Fitoussi, J. P. (2009). The measurement of economic performance and social progress revisited. Reflections and overview. Commission on the Measurement of Economic Performance and Social Progress, Paris. Also, Commission Report (2010).
56. Sweeney, J., & Sweeney, R. J. (1977). Monetary theory and the great Capitol Hill Baby Sitting Co-op crisis: comment. *Journal of Money, Credit and Banking*, 9(1), 86-89. <https://doi.org/10.2307/1992001>
57. Whetten, D. A. (1989). What constitutes a theoretical contribution?. *Academy of management review*, 14(4), 490-495. <https://doi.org/10.2307/258554>
58. Winston, M. L. (1991). *The biology of the honey bee*. Harvard University Press

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

The ASEAN Free Trade Agreement and Vietnam's Trade Efficiency

Hai, Nguyen Thi Hong¹ & Thang, Doan Ngoc¹

¹ Business Faculty, Banking Academy of Vietnam, Hanoi, Vietnam

Correspondence: Hai, Nguyen Thi Hong, Business Faculty, Banking Academy of Vietnam, Hanoi, Vietnam.
E-mail: hainth@hvn.edu.vn

Received: February 14, 2017

Accepted: March 2, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p192

URL: <https://doi.org/10.5539/ass.v13n4p192>

Abstract

This study employs a stochastic gravity model to estimate the efficiency performance of Vietnam's trade with its main trading partners from 1995-2015. Trade efficiency is measured as the ratio of actual trade volume to the maximum likelihood. Moreover, it analyzes the effects of both natural and man-made trade barriers on trade efficiency. The empirical results suggest that the actual trade of Vietnam appears to be much smaller than a possible efficiency level and that there is large space for further progress. Export efficiency outweighs that of import. Vietnam's ASEAN Free Trade Agreement membership has, in general, improved the trade efficiency, whereas tariffs and domestic devaluation have impaired it. Our findings lead to the recommendation that Vietnam should join more Free Trade Agreements and break down the man-made barriers.

Keywords: FTA, Trade Efficiency, Trade Barriers

1. Introduction

Free Trade Agreements (FTAs) have become increasingly prevalent since the early 1990s as an effective instrument to foster trade. In the year 2016 the cumulative number of physical FTAs in force was 267. International trade plays an important role in stimulating the Vietnam's economic development. In order to promote international trade, the responsible Vietnamese authorities have dynamically grown the number of FTAs with its trading partners. As of the beginning of year 2017, Vietnam has signed eleven FTAs. Six out of eleven FTAs were countersigned as a member of ASEAN Free Trade Area (AFTA). The trade volume with these countries (China, Korea, Japan, Australia and New Zealand, India, and Chile) has witnessed a substantial rise.

FTAs offer both advantages and disadvantages. In terms of the benefits, trade creation's effect arises from the abolition of trade barriers such as tariffs on domestic goods and those of other members; when it comes to the drawbacks, trade diversion's effect exists due to the birth of some kinds of non-tariff accompanying with FTA that induce production and administrative cost. A large number of seminar works have questioned which effect is dominant. A positive and significant impact on trade flows among members in the European Community was shown by several economists (Aitken, 1973; Abrams, 1980; Brada & Mendez, 1983). Bergstrand (1985) pointed out insignificant effects, whereas Frankel and Wei (1996) found mixed results. Close to our study of AFTA's effects on Vietnam trade is Le, Nguyen, and Bandara (1996), Nguyen (2009), and Narayan and Nguyen (2016). However, they all used the conventional gravity model in trade analysis proposed by Tinbergen (1962) and found a positive impact of AFTA on Vietnam's bilateral trade. FTAs have always faced various barriers in the execution phase including but not limited to governmental trade barriers, resistance from domestic industrial leaders, opposition from labor syndicates, etc. (Aghdaie et al., 2012; Riasi, 2015). Therefore, in order to have an effective FTA it is necessary to engage all the parties that will be impacted by the FTA before the agreement comes into effect (Riasi & Amiri Aghdaie, 2013).

In this study, we aim to investigate how AFTA and trade barriers affect Vietnam's trade efficiency. Trade efficiency is defined as the ratio of Vietnam's actual trade to its potential trade, which is estimated with a stochastic frontier gravity model. We simultaneously analyze export and import flow. Our numerical results imply that Vietnam's exports and imports with a lot of its trading partners are far from its efficient level with the former exceeding the latter. Joining AFTA improve the Vietnam's trade efficiency. Man-made trade barriers have been introduced for some goods reasons, but they only benefit some limited sectors. For instance, infant industries in both developed and developing countries have been protected by those barriers under a high level of global competition. In general, it is essential to eradicate man-made trade resistance so as to narrow the gap

between actual trade and trade frontiers.

2. Literature Review

The growth in Vietnam’s international trade has motivated economists to find out the determinants of this phenomenon. Le et al. (1996) analyzed the trade between Vietnam and 17 Asia-Pacific Economic Cooperation (APEC) countries. They found that economic size and geographical distance are crucial in driving the intraregional trade volumes. They claimed that artificial barriers to trade reduce their adverse effects on Vietnam’s trade compared to the 1980s. Nguyen and Xing (2008) examined the effect of Foreign Direct Investment (FDI) from 23 countries on the Vietnam’s exports. Their empirical results suggest that FDI is one of the key factors in determining the boom of Vietnam’s exports. Thanh and Duong (2011), however, show that FDI inflow boosts Vietnam’s exports but the magnitude is limited. They mainly attribute the rapid growth of Vietnam’s exports to the improvement in the level of national competitiveness and in the external trade opportunities. Narayan and Nguyen (2015) investigated the bilateral trade between Vietnam and 54 trading partners in the period 1986-2010. They found out that the impact of trade gravity variables is contingent on trading partners. They proposed that the level of economic development should be focused on when to design and implement trade policy.

All of the above papers utilize the conventional gravity model invented by Tinbergen (1962). Anderson and Wincoop (2003) claimed that the estimates of this model could be biased because the conventional gravity model cannot control the resistances to trade such as distance and official barriers to trade; most of them are hard to quantify and therefore they are added into the unobserved disturbance term (Baier & Bergstrand, 2009). Our study makes use of the stochastic frontier gravity analysis to solve the problem of with the unobservable resistances to trade. Armstrong (2007) said that this type of method is acceptable and appropriate, and thus can be used to estimate the unobservable resistances to trade. By using two-way errors, our study is closed to research by Nguyen (2009) which applies the Hausman-Taylor method to examine the effect of AFTA on export flows using panel data. But we differ from them in two main points: first, we focus on the trade efficiency; second, we divide trade barriers into natural and man-made categories and this leads to 2-step estimation.

3. Methodology: Stochastic Frontier Gravity Model and Trade Efficiency

This paper employs a modified version of gravity model that is one of the main paradigm of numerical analysis on international trade and FTAs’ effects. Canonical gravity models estimate the mean effects of driving factors of trade. Actual trade amounts are beneath the highest possibility levels due to the existence of both natural and man-made barriers. As a consequence, the gap between actual and maximum trade always exists and it could be measured by using disturbances with non-zero and non-negative mean. Kalirajan and Findlay (2005) proposed a method to estimate trade potential with gravity model motivated by the seminar works of measuring production possibility frontiers. Trade potential is defined as the highest feasible trade that can be reached without man-made barriers.

As in Armstrong (2007), the form of stochastic frontier gravity equation is given as follows:

$$X_{it} = f(Y_{it}; \beta) \exp(v_{it} - u_{it}) \tag{1}$$

where X_{it} is the bilateral trade between Vietnam and country i , $f(Y_{it}, \beta)$ captures factors which determine the potential trade (Y_{it}) without man-made resistances – and β represents a vector of unknown parameters which will be estimated. Both u_{it} and v_{it} are error terms. While the single-sided error term, u_{it} is technical inefficiency that captures the man-made resistances, v_{it} represents the impact on trade of the rest of variables. u_{it} lies between 0 and 1 and it is assumed to have a non-negative truncated normal distribution with a mean of μ at a σ_u^2 . The double-sided error term v_{it} , that is assumed to be normally distributed with a mean of zero and σ_v^2 , captures the measurement and specification error.

Specifically, we assign the model as follows:

$$\ln EX_{it} = \beta_0 + \beta_1 \ln GDP_{it} + \beta_2 \ln GDPV_{it} + \beta_3 \ln D_i + \beta_4 LL_i + \beta_5 RA_i + \beta_6 P_{it} + \beta_7 PVN_t + \beta_8 T + v_{it} - u_{it} \tag{2}$$

$$\ln IM_{it} = \beta_0 + \beta_1 \ln GDP_{it} + \beta_2 \ln GDPV_{it} + \beta_3 \ln D_i + \beta_4 LL_i + \beta_5 RA_i + \beta_6 P_{it} + \beta_7 PVN_t + \beta_8 T + v_{it} - u_{it} \tag{3}$$

Where EX_{it} and IM_{it} are the actual export and import value of Vietnam with country i at year t respectively; GDP_{it} and $GDPV_{it}$ are the gross domestic product of country i and Vietnam at year t ; GDP is used as a proxy for economic size; D_i is the weighted distance between Vietnam and country i (Head & Mayer, 2010); LL_i is a dummy variable, taking value 1 if country i is landlocked, 0 otherwise; RA_i is defined as the relative land area between country i and Vietnam; P_{it} and PVN_t capture the population of country i and Vietnam respectively. T is a time trend variable used to reflect macro-dynamic distresses. Error term v_{it} is the measurement and specification

error. Error term u_{it} represents negative effects on the trade volume because of man-made trade barriers and measure the size of inefficiency of Vietnam trade with country i .

Based on the model assignment, we can now define both the export and import efficiency with a specific trading partner i as follows:

$$TRE_{it} = \frac{\exp[\text{Ln}X_{it}]}{\exp[\text{Ln}f(Y_{it};\beta) + v_{it}]} = \frac{f(Y_{it};\beta) \exp(v_{it} - u_{it})}{f(Y_{it};\beta) \exp(v_{it})} = \exp(-u_{it}) \tag{4}$$

where $\exp(\text{Ln}X_{it})$ is actual exports or imports and $\exp(\text{Ln}f(Y_{it};\beta) + \varepsilon_{it})$ proxies the highest feasible exports to or imports from country i respectively. The higher the TRE_{it} is, the more efficient the exports/imports are, or closer to the frontier of exports/imports. The stochastic frontier gravity models are estimated by employing STATA version 13. In detail, this study used the time decay inefficiency built-in option (Battese & Coelli, 1992) to estimate u_{it} :

$$u_{it} = \eta_{it} u_i = \{\exp[-\eta(t - T_i)]\} u_i \tag{5}$$

η is a scalar parameter to be estimated and can be used to determine whether the efficiency increases, is constant or decreases. The last period ($t=T$) for trade between Vietnam and country i contains the benchmark level of efficiency. If $\eta > 0$, the level of efficiency increases towards the benchmark level or the impact of country-specific man-made policy constraint to exports/imports increases over time; If $\eta = 0$ or is insignificant, the level of efficiency remains constant or the impact of country-specific man-made policy constraint to exports/imports stays unchanged over time.

This method also applies to the parameterization of Battese and Corra (1977), who replaced σ_u^2 and σ_v^2 with $\sigma^2 = \sigma_u^2 + \sigma_v^2$ and $\gamma = \sigma_u^2 / (\sigma_u^2 + \sigma_v^2)$. It can be said that γ must take the value between 0 and 1. We can test whether we should put the error term u in the form of stochastic frontier function, or not, by testing the significance of the γ parameter. If the null hypothesis, that γ equals zero, is rejected, this would mean that σ_u^2 is non-zero and therefore the u term should be added into the model, leading to a specification with parameters that should be consistently estimated using the stochastic frontier approach.

This study utilizes panel data consisting of 30 Vietnam’s bilateral trading partners period 1995-2015, that account for an average of 85% total international trade with the world. Table 4 shows the list of countries included in this study which were selected based on their relative importance to Vietnam exports in different regions including ASEAN, ASEAN+3, NAFTA, the European Union, and Others (Australia, New Zealand, India, and Russia). The main reason this study takes this period is because Vietnam joined ASEAN in 1995. We use a variety of data sources. Exports/imports data is taken from the International Monetary Fund (Direction of Trade Statistics-DOTS). Gross Domestic Products (GDP), Population (POP), Real Effective Exchange Rate, and all product tariff rates are taken from the World Bank database. Data on the weighted distance measured in kilometers (D) and land area (Area) are taken from the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). The economic freedom index (EF) is taken from the Heritage Foundation. The list of ASEAN member countries was taken from official website asean.org. Export/import, gross domestic products, Real Effective Exchange Rate, and distance are transformed to logarithms. Table 6 in the appendix shows the estimation results of stochastic frontier gravity model. In general, the estimators are analogous to our expectation.

4. Estimated Trade Efficiency

Estimated trade efficiencies are shown in Table 1 and 2, whereas Figure 1 plots the trend. Table 1 describes the estimation with Asian pacific countries, consisting of eight ASEAN countries, China, Japan, Korea, and Russian plus India. According to the definition, the estimated trade efficiencies should lie between 0% and 100%, where 100% implies that trade takes place at the frontier, the maximum possibility. In general, the empirical results infer that both export and import efficiencies of Vietnam improved considerably in period surveyed 1995-2015. Exports perform much more efficiently than imports do. The average export efficiency with ASEAN countries grew from 37.54% in the years between 1995 and 1999 to 48.73% in the period 2010-2015, while imports from ASEAN rose about one and a half times, from 19.94% to 33.41% in the same periods. In particular, the trade of Vietnam with Singapore outweighed 90%, which is very near to the highest potential. On the other side, the trade efficiencies with Thailand and Indonesia were still less than 30%, indicating that actual trade with these nations were far from the maximum likelihoods. The space for trade’s growth are enormous. Due to the adverse effects of economic sanction imposed on Myanmar by the US, its trade efficiency with Vietnam was the least among ASEAN members, only below 5%.

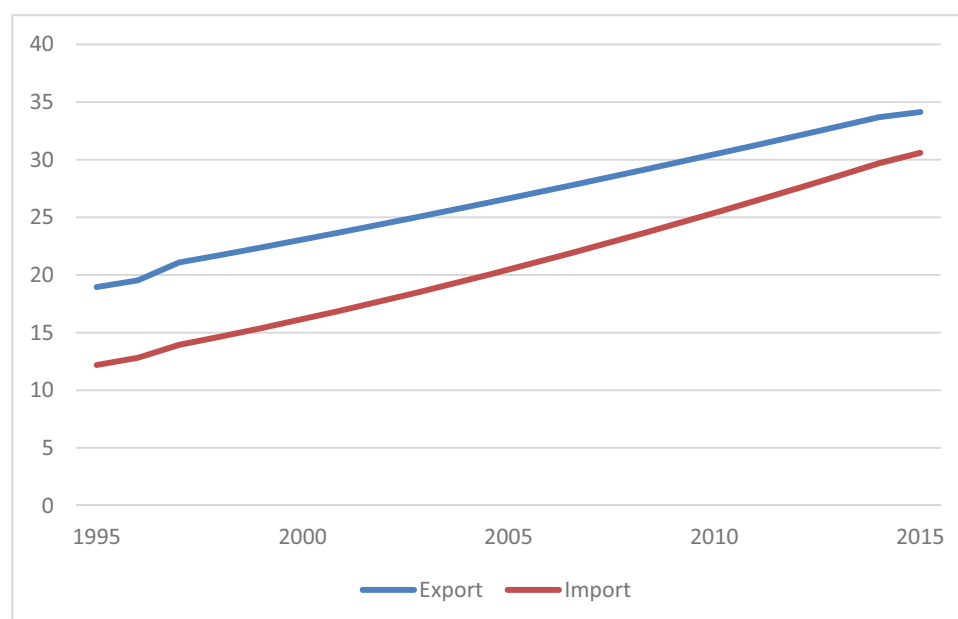


Figure 1. Trend of Vietnam's trade efficiencies (%)

Table 1. Estimated Efficiencies of Vietnam's trade to Asia Pacific Countries + India (%)

	1995-99		2000-04		2005-09		2010-15	
	Export	Import	Export	Import	Export	Import	Export	Import
Singapore	86.95	85.44	88.57	87.74	89.99	89.70	91.36	91.51
Cambodia	86.86	3.92	88.48	6.77	89.92	10.65	91.30	16.08
Lao	31.66	30.91	36.82	37.68	41.99	44.43	47.55	51.57
Malaysia	30.62	12.62	35.77	17.88	40.94	23.90	46.54	31.10
Philippines	30.53	2.42	35.68	4.52	40.85	7.62	46.45	12.24
Thailand	17.66	10.91	22.17	15.85	27.03	21.62	32.61	28.65
Indonesia	15.20	12.95	19.46	18.28	24.13	24.34	29.60	31.57
Myanmar	0.82	0.37	1.53	1.05	2.65	2.26	4.47	4.55
ASEAN	37.54	19.94	41.06	23.72	44.69	28.07	48.73	33.41
Japan	47.60	17.09	52.48	23.02	57.12	29.49	61.90	36.91
Korea	25.40	73.14	30.41	77.11	35.56	80.57	41.25	83.83
China	9.48	5.31	12.92	8.71	16.90	13.13	21.82	19.08
Australia	51.69	21.07	56.37	27.40	60.78	34.08	65.28	41.54
Russia	8.79	15.04	12.10	20.69	15.97	26.99	20.78	34.34
New Zealand	3.31	21.22	5.18	27.56	7.64	34.25	11.05	41.71
India	0.51	0.97	1.02	2.11	1.85	4.04	3.29	7.29

Source: authors' calculation

Regarding Vietnam's trade with China, Japan, and Korea, while efficiency of exports to Japan is the highest, followed by that to Korea, at 61.9% and 41.25% respectively, that of imports from Korea ranks first, then Japan with the levels being 83.83% and 36.91% respectively. It is worth mentioning that until 2015 the trade with China was still less than one fourth of the estimated maximum possibility. Although ASEAN-China FTA came into force since 2005, Vietnam, as a member of ASEAN, could take the advantage of this FTA regarding trade. In terms of exports, due to the intensive competition of similar products made in China, Vietnamese goods with high labor intensity such as textiles can not compete successfully and are unable to augment the export volume in order to reach the highest likelihood, which is principally defined by the economic size of trading partners. It is odds that efficiency of imports from China was a mere 19.08% while import volumes from China accounts for one third. The reason may come from the gravity model's properties that claim that the higher the similarity between two countries is, the more efficient the trade is. China is 50 times in GDP and 15 times in population

bigger than Vietnam. This reason is also used to explain why the efficiency of Vietnam’s trade with India is very low, at only below 10%. Moreover, the free trade agreement between ASEAN and India only came into effect several years ago, (2010) and it then has had a profound effect on trade flows between Vietnam and India. The Vietnam’s export volume to India in 2010 and 2015 are twice and six times, respectively, higher than in 2009.

Table 2. Estimated Efficiencies of Vietnam’s trade to EU and NAFTA members (%)

	1995-99		2000-04		2005-09		2010-15	
	Export	Import	Export	Import	Export	Import	Export	Import
Netherland	31.68	11.14	36.84	16.12	42.01	21.93	47.57	28.99
UK	18.49	4.62	23.08	7.76	27.98	11.93	33.59	17.65
Belgium	17.49	8.88	33.25	19.27	38.43	25.44	44.08	32.72
France	13.68	15.99	17.77	21.78	22.29	28.16	27.65	35.55
Italia	9.14	7.80	12.51	11.98	16.43	17.13	21.30	23.70
Spain	8.96	2.30	12.29	4.34	16.19	7.35	21.03	11.89
Poland	5.29	2.89	7.77	5.24	10.87	8.61	14.95	13.52
Sweden	5.06	8.04	7.49	12.29	10.52	17.50	14.54	24.12
Denmark	4.22	7.47	6.40	11.57	9.18	16.64	12.93	23.14
Finland	1.72	4.31	2.93	7.32	4.66	11.37	7.24	16.96
Germany	1.40	0.08	2.44	0.26	3.98	0.71	6.32	1.78
Greece	0.51	0.97	1.02	2.11	1.85	4.04	3.29	7.29
EU	9.80	6.21	13.65	10.00	17.03	14.23	21.21	19.78
USA	25.47	7.17	30.48	11.18	35.63	16.17	41.32	22.61
Canada	7.84	5.63	10.96	9.13	14.65	13.67	19.30	19.71
Mexico	2.62	0.50	4.23	1.22	6.40	2.56	7.65	3.96
NAFTA	11.98	4.43	15.22	7.18	18.89	10.80	22.76	15.43

Source: authors’ calculation

Table 2 shows estimated efficiencies of Vietnam’s trade with EU and NAFTA members. The general picture is that the trade efficiencies with both EU and NAFTA did not exceed one half of maximum level. Among EU members, the trade efficiencies with Netherland, UK, Belgium and France are 47.57%, 33.59%, 44.08% and 27.65% respectively for exports and 28.99%, 17.65%, 32.72% and 35.55% respectively for imports. The remainders are below one fourth. By 2015, Vietnam’s trade efficiency with EU are on average 21.21% and 19.78% for exports and import respectively. The efficiency with NAFTA’s member countries is also moderate. In spite of the largest foreign market of Vietnam’s goods (US 21.8%; China 12.4%, Japan 8.3% in 2015), the export efficiency was only 41.32%. Trade efficiency with Canada and Mexico were less than 20% and 10% of the maximum respectively. The estimation expresses that, if man-made trade resistances could be abolished, Vietnam’s trade with those countries surveyed could grow substantially.

5. Trade Efficiencies and AFTA

Our estimation implies that, Vietnam’s trade attained very high efficiency with a few countries such as Singapore, whereas performing at very low level with most of its trading partners, such as China, India, and Canada. In order to enhance the efficiency of Vietnam’s trade, it is vital to identify driving determinants in diminishing the efficiency level. In this part, we employ regression analysis to discover those determinants. We consider the following regression models:

$$TRE_Export_{it} = \delta_0 + \delta_1 ASEAN_i + \delta_2 EF_{it} + \delta_3 TR_{it} + \delta_4 LnREERVN_{it} + \epsilon_{1t} \tag{6}$$

$$TRE_Import_{it} = \delta_0 + \delta_1 ASEAN_i + \delta_2 EF_{it} + \delta_3 TR_{it} + \delta_4 LnREER_{it} + \delta_5 EFVN_t + \delta_6 TRVN_t + \epsilon_{2t} \tag{7}$$

In equation (6) and (7), ASEAN is the dummy variable, taking value one for the member of ASEAN, zero otherwise. TR_{it} and $TRVN_t$ are the weighted tariff levied by country i and Vietnam to imports respectively. High tariffs reduce the Vietnam’s trade efficiency. EF_{it} and $EFVN_t$ are the indexes of economic freedom of country i and Vietnam at year t, which is a composite measure by the Heritage Foundations of ten factors, separated into four categories namely, rule of law, limited government, regulatory efficiency, and open market. The indexes take value between 0 and 100 with higher indexes implying lower trade barriers. While the higher economic freedom in Vietnam results in an increase in Vietnam import flows, the greater economic freedom for trading

partners induces a lift in their foreign trade flows. Thus, both economic freedom in Vietnam and its partners are predicted to increase Vietnam's trade efficiency. $REER_{it}$ and $REERVN_t$ are the real effective exchange rate of country i and Vietnam at year t . A devaluation of domestic currency is expected to boost exports and undermine imports.

Table 3. Determinants of Trade Efficiency

Variables	TRE's Export	TRE's Import
ASEAN	0.321 877*** (0.019 987)	0.145 361*** (0.023 169)
EF	0.007 659*** (0.000 758)	0.006 086*** (0.000 994)
TR	-0.003 449*** (0.001 227)	-0.001 870* (0.001 087)
LnREERVN	-0.115 654** (0.047 863)	
LnREER		0.042 912* (0.041 244)
EFVN		0.003185* (0.003 307)
TRVN		-0.008 85** (0.003 938)
Constant	0.257 234 (0.232 506)	-0.454 369* (0.270 737)

Note: numbers in parentheses are standard errors.

*** significance at the 1% level; ** significance at the 5% level; * significance at the 10% level.

Table 3 shows the regression results. The estimated coefficients of ASEAN are 0.3219 and 0.1453 for export and import respectively and all statistically significant at 1% level, suggesting that the ASEAN membership contributes positively to the Vietnam's trade efficiency. The estimated coefficients of tariff are negative and statistically significant, implying that tariffs levied by trading partners or by Vietnam plays as one of driving factors to undermine the trade efficiency between Vietnam and those countries. The trading partners' economic freedom significantly raised trade efficiency, diminishing the gap between the actual and potential trade. Vietnam's economic freedom coefficient is significant and positive, which reflected the achievements of Vietnam Economic Reform, the so-called "Doi Moi". The coefficient of LnREER is 0.0429 and significant at 10% level, whereas that of LnREERVN is -0.1157 and significant at 5%. It means that Vietnam can not enjoy the benefits from domestic currency's devaluation as its trading partners do. The low competitive ability of Vietnam's products is the main reason. Moreover, the loss of Vietnam dong value increases the price of imported inputs mainly used to produce exporting goods, which further deteriorates the competitive ability of Vietnam's exports.

It is worthy to explain the reason why export efficiency exceeds import's as we saw in Figure 1. The adverse effects of Vietnam's trade balance deficit in the long term lead to a gap between exports and imports barriers. Trade deficit comes from the prolonged severe imbalance in the structure of export's and import's goods. To reduce the trade deficit, Vietnam in the past two decades has adjusted the exchange rate policy, implemented the restructuring of import and export goods, improved the institutional environment, and provided policies that promoted export industries. As a result, the export barriers are lower than those of import, reflecting the export-oriented industrialization of Vietnam. Vietnam's government has continued to implement policies restricting imports to protect domestic industries, the average tax rates of Vietnam are twice higher than its trading partners (11.4% versus 5.7%) (World Bank tariff database). Moreover, regression results showed that the absolute value of estimated coefficients of TRVN is five times higher than that of Tariff, lowering import efficiency much more than export efficiency.

6. Concluding Remarks

In this paper, we estimated the trade efficiency of Vietnam with its major trading partners and determined factors which affect Vietnam's trade efficiency. Stochastic gravity model was employed with data from 30 countries in the period 1995-2015. Our empirical results indicate that, Vietnam's trade is much below the highest potentials and exports contribute more to the overall efficiency than imports do. Although increasing over periods surveyed,

the Vietnam's trade efficiencies are still very modest, with the average number being around 30% in 2015. This implies that there is still large room for improving trade relation between Vietnam and its trading partners. Vietnam's trade efficiencies with AFTA members are much higher than with EU and NAFTA. This indicates that there is a need to improve Vietnam's trade with EU and NAFTA because they are the main trading partners of Vietnam.

Our study reveals that joining AFTA and relaxing economic constraints help to enhance Vietnam's trade efficiency, while imposing tariffs and devaluating Vietnam dong undermines it. The benefits of entering AFTA become evident; the success of Vietnam's 1986 economic reform improves the economic environment and increases the trade efficiency. While tariffs are of importance to protect the domestic industries, especially the infant ones, in general they can hinder the Vietnam's trade efficiency. Due to the weak competition of export products, Vietnam can not enjoy the benefit derived from domestic currency devaluation. Our empirical results also suggest some policy implication. To improve the Vietnam's trade efficiency, it is vital that Vietnam should join more regional FTAs, improve economic freedom, cut tariffs and improve the competitive ability of its products to take the advantage of domestic currency devaluation.

References

- Abrams, R. K. (1980). International Trade Flows under Flexible Exchange Rates. Federal Reserve Bank of Kansas City. *Economic Review*, 65(3), 3-10. Retrieved from <https://www.kansascityfed.org/PUBLICAT/econrev/EconRevArchive/1980/1q80abra.pdf>
- Aghdaie, S. F. A., Seidi, M., & Riasi, A. (2012). Identifying the barriers to Iran's Saffron export by using Porter's diamond model. *International Journal of Marketing Studies*, 4(5), 129-138. <https://doi.org/10.5539/ijms.v4n5p129>
- Anderson, J. E., & Van Wincoop, E. (2003). Gravity with gravitas: a solution to the border puzzle. *The American Economic Review*, 93(1), 170-192. <https://doi.org/10.1257/000282803321455214>
- Aitken, N. D. (1973). The Effect of EEC and EFTA on European Trade: A Temporal Cross-Section Analysis. *American Economic Review*, 5, 881-892. <http://www.jstor.org/stable/1813911>
- Armstrong, S. (2007). Measuring Trade and Trade Potential: A Survey. *Asia Pacific Economic Papers*, No. 368, 1-19. <https://doi.org/10.2139/ssrn.1760426>
- Baier, S. L., & Bergstrand, J. H. (2009). Bonus vetus OLS: A simple method for approximating international trade-cost effects using the gravity equation. *Journal of International Economics*, 77(1), 77-85. <https://doi.org/10.1016/j.jinteco.2008.10.004>
- Battese, G. E., & Coelli, T. (1992). Frontier Production Functions, Technical Efficiency and Panel Data: with Application to Paddy Farmers in India. *Journal of Productivity Analysis*, 3(1/2), 153-169. <https://doi.org/10.1007/BF00158774>
- Battese, G., & Corra, G. S. (1977). Estimation of A Production Frontier Model: With Application to the Pastoral Zone of Eastern Australia. *Australian Journal of Agricultural Economics*, 21(3). <https://doi.org/10.1111/j.1467-8489.1977.tb00204.x>
- Bergstrand, J. H. (1985). The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence. *Review of Economics and Statistics*, 67(3), 474-81. <https://doi.org/10.2307/1925976>
- Brade, J. C., & Mendez, J. A. (1983). Regional Economic Integration and the Volume of Intra-regional Trade: A Comparison of Developed and Developing Country Experience. *Kyklos*. 36(4), 589-603. Retrieved from <https://asu.pure.elsevier.com/en/publications/regional-economic-integration-and-the-volume-of-intra-regional-tr>
- Frankel, J., Stein, E., & Wei, S. J. (1996). Regional Trading Agreements: Natural or Supernatural? *American Economic Review*, 86(2), 52-56. <http://users.nber.org/~wei/data/fsw1996/fsw1996.pdf>
- Head, K., & Mayer, T. (2010). Illusory Border Effects: Distance Mismeasurement Inflates Estimates of Home Bias in Trade. *The gravity model in international trade: Advances and applications*, 165-192.
- Kalirajan, K., & Findlay, C., (2005). *Estimating Potential Trade Using Gravity Models: A Suggested Methodology*. Foundation for Advanced Studies on International Development, Tokyo.
- Le, Q. P., Nguyen, D. T., & Bandara, J. S. (1996). Vietnam's foreign trade in the context of ASEAN and the Asia-Pacific region: a gravity approach. *ASEAN Economic Bulletin*, 185-199. <https://doi.org/10.1355/ae13-2c>

Linnemann, H. (1966). *An econometric study of international trade flows* (Vol. 234). Amsterdam: North-Holland Publishing Company.

Narayan, S., & Nguyen, T. T. (2016). Does the trade gravity model depend on trading partners? Some evidence from Vietnam and her 54 trading partners. *International Review of Economics & Finance*, 41, 220-237. <https://doi.org/10.1016/j.iref.2015.08.010>

Nguyen, T. K. (2009). Gravity model by panel data approach: an empirical application with implications for the ASEAN free trade area. *ASEAN Economic Bulletin*, 26(3), 266-277. <https://doi.org/10.1355/ae26-3c>

Riasi, A. (2015). Barriers to international supply chain management in Iranian flower industry. *Management Science Letters*, 5(4), 363-368. <http://dx.doi.org/10.5267/j.msl.2015.2.005>

Riasi, A., & Amiri Aghdaie, S. F. (2013). Effects of a hypothetical Iranian accession to the world trade organization on Iran's flower industry. *Consilience: The Journal of Sustainable Development*, 10(1), 99-110. <https://doi.org/10.7916/D8HQ3ZK8>

Thanh, V. T., & Duong, N. A. (2011). Revisiting exports and foreign direct investment in Vietnam. *Asian Economic Policy Review*, 6(1), 112-131. <https://doi.org/10.1111/j.1748-3131.2011.01187.x>

Tinbergen, J. (1962). *Shaping the World Economy: Suggestions for an International Economic Policy*, The Twentieth Century Fund, New York. <https://doi.org/10.2307/2229041>

Wall, H. J. (1999). Using the gravity model to estimate the costs of protection. *Review-Federal Reserve Bank of Saint Louis*, 81, 33-40. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.6.5455&rep=rep1&type=pdf>

Xuan, N. T., & Xing, Y. (2008). Foreign direct investment and exports The experiences of Vietnam. *Economics of transition*, 16(2), 183-197. <https://doi.org/10.1111/j.1468-0351.2008.00321.x>

Appendix

Table 4. Vietnam’s Trading Partners

Region/Country		Region/Country	
ASEAN		EU	
Indonesia	IDN	Belgium	BEL
Cambodia	KHM	Germany	DEU
Lao PDR	LAO	Denmark	DNK
Myanmar	MMR	Spain	ESP
Malaysia	MYS	Finland	FIN
Philippines	PHL	France	FRA
Singapore	SGP	United Kingdom	GBR
Thailand	THA	Greece	GRC
ASEAN+3		Italy	ITA
China	CHN	Netherlands	NLD
Japan	JPN	Poland	POL
Korea, Rep.	KOR	Sweden	SWE
NAFTA		Others	
Canada	CAN	Australia	AUS
Mexico	MEX	New Zealand	NZL
United States	USA	Russia	RUS
		India	IND

Table 5. Statistical Summary

Variable	Mean	Std. Dev.	Min	Max	Source	Expected signs
LnEX	19.726	1.902	11.314	24.265	Tinbergen (1962)	
LnIM	19.458	2.087	9.210	25.013	Tinbergen (1962)	
LnGDP	26.736	1.828	20.970	30.518	Tinbergen (1962)	+

LnGDPVN	24.854	0.727	23.755	25.989	Tinbergen (1962)	+
LnD	8.434	1.011	5.861	9.608	Tinbergen (1962)	-
PVN	82.193	5.844	71.995	91.703	Linnemann (1966)	+
P	136.722	298.541	3.524	1371.22	Linnemann (1966)	+
EF	66.1	10.299	33.5	89.4	Wall (1999)	+
EFVN	46.925	4.246	38.6	51.7	Wall (1999)	+
TR	5.763	5.974	0	56.4	Linnemann (1966)	-
TRVN	11.434	3.487	6.63	15.57	Linnemann (1966)	-
LnREER	4.606	0.300	2.497	7.136	Anderson & Wincoop (2003)	+
LnREERVN	4.705	0.149	4.478	4.978	Anderson & Wincoop (2003)	+

Source: Author's calculation based on data collection

Table 6. Maximum Likelihood Estimates of the Stochastic Gravity

Variable	LnEX	LnIM
LnGDP	0.503 168*** (.104 739)	0.6721 288*** (0.072 789)
LnGDPVN	1.358 51*** (0.355 574)	0.810 126** (0.330 268)
LnD	-0.364 271** (0.1433 375)	-1.185 056*** (0.109 884)
PVN	1.12*** (0.135 695)	0.471 919*** (0.132 605)
P	0.001 015** (.000 479)	0.001 323*** (0.000 302)
LL	-0.222 649 (0.329 801)	-0.711 911** (0.324 108)
T	-1.138 67*** (0.162 831)	-0.504 946*** (0.157 479)
Constant	-102.6388*** (16.639 73)	-39.924 46** (16.065 57)
Mu	1.098 108** (0.447 988)	1.289 445*** (0.307 328)
Eta	0.028 191*** (0.004 129)	0.037 003*** (.003 150)
Sigma ²	1.110 187	0.934 850
Gamma	0.833 919***	0.820 268***

Note: Values in parentheses () are standard errors. *** Significant at the 1 per cent level; ** Significant at 5 per cent level; * Significant at 10 per cent level.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Leveraging Social Media for Development in Organisations

Ajith Sundaram^{1,2}

¹ Research Scholar, Anna University, Chennai, India

² Assistant Professor, Rajagiri Centre for Business Studies, India

Correspondence: Ajith Sundaram. E-mail: ajithsundaram@gmail.com

Received: February 14, 2017

Accepted: March 2, 2017

Online Published: March 24, 2017

doi:10.5539/ass.v13n4p201

URL: <https://doi.org/10.5539/ass.v13n4p201>

Abstract

Marketers must never underestimate an online buyer. If they are assuming that mere marketing efforts from their side will influence a buyer, then they are being uncalculated and ignorant. Potential customers are not isolated people who are glued to their computer systems confused as to what product to buy. Instead they are tech-savvy, socially active, smart buyers who make a detailed analysis about the product they intend to buy online. Therefore, marketers need to re-design their online marketing strategies to suit to the needs of the buyer. The marketing approach should focus on social influence marketing as well.

Keywords: Social Media Marketing, Facebook, YouTube, Social Influence Marketing

1. Introduction

To begin with, let us define Social Influence Marketing—a system that encompasses social media and social influencers to accomplish their business objectives. Social media is termed as those online applications, platforms and media which aim to simplify interactions, collaborations and content sharing. In social media information is created and catered to its users by its users. In short, it is a democracy on the internet. Information, in this context, refers to the comments posted, photos or videos shared, blogs, conversation, etc. There has been enough evidence to prove that the social networking sites have become the typical online media. Social network sites has the most audience compared to any other media tools. Social Influencers are those who have the power to create a huge impact on their peers by way of their content disseminating features. They can be anyone starting from a spouse, a friend, a colleague or a product reviewer, who have a major influence on the decision making process of the buyer. In simple terms, social influencers are those who are directly or indirectly associated with the brand affinity or buying decision process. They may be doing this intentionally or unintentionally through their participation on social media platforms by posting reviews or commenting about the products.(Fire, Goldschmidt, & Elovici, 2013)

Social influence marketing deals with the identification and understanding the influencers of the buyer and his needs. The terms social influence marketing and social media marketing are used interchangeably, however, there is a subtle difference. The former focusses on the influencers of the buying process whereas the latter focusses on the ads on social networking sites like Facebook, Twitter, etc. (Fire et al., 2013; Guthrie, Cuganesan, & Ward, 2008)

1.1 *Understanding the Fundamentals of Influence*

Long before Web came into existence, people were easily influenced and motivated by fellow human beings. They relied on the advice and experience of others before buying a product. Whenever a product was described in a positive light, it inspired people to buy it. The degree to which a person can be influenced is determined by multiple factors. Undoubtedly, the product worth being the first. Goods can be low-consideration purchases that is, low involvement goods or those with less risk and high consideration purchases that is, high involvement goods or those with more risks. In those that involved low-consideration purchases, opinions hardly matter and people do not seek others advice as the products are less expensive goods. On the other hand, for those that involved high-consideration purchases, for example, a high value product like a motor-car, people seek the advice and opinion of many, in person and online. This is where social influencers have a much larger role to play. People do not want to be the first to try a product and take a risk especially in high worth goods. Most consumers are of the opinion that they are at a safe zone when they take the advice, feedback and experience of others who already used it before them. So a marketer should be aware about which influencer to influence first

at the time of marketing. So in addition to giving a product description and advertisement to the consumers, the marketer should first choose the type of influencer to target his advertisement. Basically social influencers can be classified into three types- referent, expert, and positional. (Wey, Blumstein, Shen, & Jordán, 2008)

Referent influencer-A referent influencer is someone who is active on social platforms. They belong to the consumer's social circle and have an impact on the purchasing decision of others through their reviews, status updates and comments in blogs and community platforms. As the consumers know some of these influencers personally, there is a credibility in their interaction and people are easily influenced by their advice and opinions and consider them as meticulous analysers. They hold a grip on the consumers because of their relationship with them. In spite of reviewing the products through their own sources, consumers trust and rely on these influencers for purchase decisions.(Guthrie et al., 2008)

Expert influencer- An expert influencer or key influencer is a genius who knows the nuances of product performance. Expert influencers are considered an authority on the product who may not know their audience personally. They have a huge fan following and have their own blogs where their guidance and advice can be sought. They pass their judgement about the product on review sites and rate and rank products given their skill and expertise acquired out of their experience or their association with the organization. (Patchin & Hinduja, 2010)

Positional influencer- A positional influencer or peer influencer is in a close relationship to the buyer. They typically belong to the consumer's inner circle, may be a family member or a close friend. They have the direct influence on the buyer in his decision making process and they may also directly associated in the usage of the product. Their opinions have the highest priority and has the most social influence.(Barrutia & Echebarria, 2013)

Therefore, each time a person intends to buy something, a guidance or opinion is got either from an expert or from a known person. We may wonder why there is such a huge discussion on influencers. That is because the rise of social media sites have been phenomenal and the number of visitors and users accessing these sites have reached around 175,000, considering just a single site, Facebook, alone. People are crazily buying online. There are more and more buying happening online every day. People buy clothes, shoes, grocery, mobile phones, televisions, computer, jewellery and cars too. Apart from making online purchases, people discuss about it, review the products, recommend them if it delights them, ultimately influence some online user into buying or not buying on a much larger scale. People's real world decisions are shifting to the internet in an unfathomable manner. Social media platforms like Facebook, LinkedIn, Twitter, You Tube, Instagram, Yelp, etc, are some of the few websites where people seek help from other users through guidance, reviews and recommendations. Shrewd marketing practices nowadays focus on redesigning the company websites to enable customers bring in their social influencers into purchase process. Companies have realised that buying is no more an isolated activity. People, too, were accustomed to this group decision making long before internet marketing became popular. Hence social influence marketing has become inseparable part of any promotion campaign.(Gneiser, Heidemann, Klier, & Landherr, 2009)

Even today, some managers need to be coaxed into investing in online marketing campaigns. A lot of effort is needed in convincing them how viable and cost effective the social media platforms are. Though many feel that internet is a youth sensation, it is the best medium to communicate about the brand and establishing credibility.

1.2 Comparing Social Influence Marketing with Other Marketing Efforts

However, marketers must not ignore the traditional marketing methods like direct mail, advertising on television, in print, public relations, etc. Social marketing will not be a success when carried out in isolation. It has to be integrated with the mainstream channels of advertising. Those employees who deal in conventional marketing campaigns need to be reassured that social influence marketing complements their marketing efforts. They should not be alienated though some of the social influence marketing tactics are not in sync with the traditional channels. When other forms of marketing practices are disregarded and discredited, business may be affected in the long run. As of now, there is a need to discuss the traditional marketing procedures.(Chu & Kim, 2011)

Direct mail: Direct mail is about interacting with an active customer database and initiating promotion activities by means of circulars, catalogues, door delivering merchandise. Direct mail is the most efficient mode of personalised and targeted marketing. Though direct mails are a nuisance at times, it is successful when used for communicating about offers. The catalogue industry which had been making a lot of money through this direct mail system is likely to suffer losses once social influence marketing gains momentum. In today's scenario, with more and more people opting to connect with their influencers before making a purchase, there are little chances of them trusting a flyer in a direct mail or what the company website boasts about the product. People would rather get a review from a peer than browse through the direct mail. Direct mail started losing its credibility as

most of them have stopped trusting the promotion campaigns of the marketers and have started depending on feedbacks from influencers. There is anyway, another side to the story. People get to know more consumers through social marketing. This can be created into a database for direct mail which is like opting to receive mails in exchange for information and membership in an online community. Direct mails, though have lost favour among consumers, are still regarded as a starting point for an online community or for rewarding members through mailing coupons. (Anon, 2000)

Public relations (PR): Public relations professional were the early advocates of social media marketing. They were tech savvy experts and some of them equated social media as the traditional media and carved a niche in this space. They, with their acumen, identified the influencers and bestowed exclusive privileges upon them. PR professionals tracked the comments and interviews of influencers to study how much recognition their brands got. In fact, these influencers were PR professionals earlier and they recognised the potential of social media before anyone else did. They used social media to complement a company's PR efforts. However, there is a complex relationship between PR and social media. PR deals more with traditional media and aims at pushing the company's objectives to the press and amplify the message. But social influence marketing is more of influencers influencing potential users. So on a social media platform, influencers have a much powerful status than a PR expert. Although, PR professionals push the company's message on social media realm which conflicts with the social influence marketing. The company must also keep in mind their PR goals and ensure that there is no contradiction when they take to social media marketing. For this, PR members of the company can interact with the influencers and device strategies for marketing. For PR professionals, social influencing marketing is just an extended, updated, technical version of the job they do offline. (Jiang, 2006)

Display advertising: Display advertising refers to those sites where marketers promote their products after identifying the online behaviour of the customers. They identify those sites which are frequented by target customers, buy some space online, design ads on it and finally measures the effectiveness of the ad campaign by calculating the number of times the ad was viewed and shared. The process in itself is very cumbersome, starting from identifying the most frequented site, buying space, analysing the worth of money spent on the ad on the platform and if it has produced the desirable effect. But the highlight of display ad is that the success of the advertisement can be measured as compared to those on television and print. The relationship to social influence marketing is analysed and the following are some of the linking points. (Provost, Dalessandro, Hook, Zhang, & Murray, 2009)

Market to the social influencers who surround the customer, as well as the customer: One way to market to the influencers is by using display ads on sites that not only the customer visits but also those that influencer visits. The effectiveness of the ad, in this case, is difficult to measure as the influencers may not purchase the product themselves but may remember the ad and influence the buying process of others. (D. Boyd, 2008)

Place display advertising on the social platforms —like Facebook, MySpace, and YouTube — that your customers frequent: Social media sites accept display advertising in many forms, generating a chunk of their revenue. In spite of presenting poor results, as the users hardly notice the advertisements, newer ad formats are emerging. For instance, a concept called 'Appvertising' is gaining popularity. It is an advertisement within an application that are available on social network. These are found to yield better results. Another feature is requesting the consumers to rate the quality and content of the advertisement they are viewing. This method is for identifying the appropriate target audience.

Use interactive, social advertising: Nowadays, marketers have become innovative where they post an advertisement in a leading and popular website. Audience are invited to react to some queries within the ad entity. One can see responses of other users in this entity. This is a perfect example of ad entity becoming an avenue for interaction.

Promotions: Promotions is a type of marketing activity that is most affected due to social influence marketing. Promotions are marketing efforts undertaken by the company where the customers are incentivised to stimulate product purchase. Promotion primarily involve contests, rebates, samples, sweepstakes and discounts. As more of interactions are taking place on social media sites, people hardly pay attention to promotional offers or are uninterested in spending time on these. However, marketers have identified the potential of social influence marketing in such scenario. By engaging social influence marketing concepts, promotional strategies can be designed to attract social influencers. With the participation of a social influencer, marketers expect that their participation would influence others to get stimulated into trying the offers. (D. M. Boyd & Ellison, 2008)

Marketing via Niche Networks and Online Influencers: Marketers are expecting that social activity would move beyond just Facebook, Twitter, YouTube and MySpace. There would be greater disintegration of user created

data and there would be uninterrupted flow of information between major media sites and the rest of internet. MySpace, Facebook, Classmates, MyLife and Buzznet top the list of most visited social platforms as on February 2009. Rather than merely focussing on major social media platforms, marketers can consider advertising on niche platforms, as customers spend an equal time on these too.

Finding the Right Social Platforms: It is a real challenge for the marketers in identifying where the potential customers are spending their time on. Marketers need to look at various other avenues beyond the social media sites. Customers may be online in video websites, blogger networks, mainstream media sites and social publishing applications.

Classifying the social platforms: On the basis of size and growth rate, four major social platforms are identified. They are Facebook, MySpace, YouTube and Twitter. Some of the major media and entertainment sites have accommodated so much functionality that they are entitled to be called platforms. Next classification is niche social platforms. It focusses on a narrow set of audience and subject. These sites like LinkedIn and CafeMom concentrate on a niche market and are the masters of owning it. The social platform infrastructure providers are those category that enable users to create their own blogging space. It has community pages, member spaces and activity areas. Finally, there is the blogosphere. Blogging sites have featured in the list of top entertainment sites. Blogs have no formal relationship with each other but features like trackbacks, comments and reciprocal networking bind them together. So marketers can focus on major social platforms, niche social platforms, social infrastructure providers and blogospheres when they are looking to market to potential customers.

Understand your customers: Marketers can identify the online behaviour of the customers through a technique called socio-technographics (the way in which customers engage on social media). The process starts by knowing the engagement level of the customers on the web. With the help of Forrester Social Technographic Tool, profiling of customers can be done, after which, the tool gives an analysis of the customers. Customers are divided into creators, critics, collectors, joiners, spectators and inactives. Another tool Quantcast gives the audience profile of a social platform. The third type of study is by interacting with customers directly. Study is conducted on how and where socialisation takes place. A sample of users are interviewed which can generate almost accurate insights regarding social behaviour. The live responses of the customers regarding the product, brand or company is obtained. However, it is imperative for the marketers to be abreast of research activities as online social behaviours are dynamic. They need to run a parallel program on ongoing social research to be ahead of the changes. (Papacharissi, 2009)

1.3 Research the Platforms

The dynamics of each social media platform need to be thoroughly understood to predict and design the social influence marketing strategy. Lack of awareness may render the marketing campaign futile. Though there are no specific guidelines for advertising in each site, the advertising industry have begun to establish formats. Social Media Subcommittee of Interactive Advertising Bureau is working on streamlining those aspects that go into the making of advertising on social sites. Marketing strategies on social platforms are still in their embryonic stage, however innovative practices are setting benchmarks for effective advertising. Advertising layouts cannot be all-inclusive. They can be classified as

- Traditional display advertising- the usual banners that we see across the internet. They have cookie-based performance and are treated as traditional display banners and measured mainly through cost per impressions (CPM) or click through rates (CTR)
- Social advertisements- a person's social graph is depicted on the ad entity encouraging involvement. The social advertisement include user created data and are directed towards friends in a network.
- Sponsorships- works on the principle of pay per post format where bloggers are motivated to discuss on relevant topics. The bloggers have utmost autonomy over the content in addition to minute guidelines.
- Influencer marketing- Some social platforms enable to network with influencers who discuss about the activity assigned to them in their blogs.
- Widgets and applications- some platforms permit the making and presentation of widgets and applications on their platforms. Popular widgets are either funded or new ones created to meet the necessities of the users. These widgets are mainly boosted by the media sites.
- Brand pages- they are virtual spaces where products are marketed by highlighting the features of the same and where promotional campaigns are undertaken. They may be screen savers, games, wallpapers, etc.

- Gifting- virtual gifts like cakes, cards, chocolates are offered to motivate the users. These are immensely popular and go viral instantly.
- Other promotional opportunities- branding opportunities include funding different spaces of social platform or applications, contests, campaigns, share database details for research and merchandising.

RFP (request for proposals) the vendors: After finalising the social platform and target audience, request for proposal (RPF) may be initiated. They are feasible only in high budget marketing programs. Some hints to be considered when issuing RPF.

- Describe the objectives explicitly- Social platforms are keen on getting business, in fact, they are helping the marketers to position their brands among the audience. There is a need to describe the objectives unambiguously to build involvement and trust.
- Be clear about the benchmarks for success- social platforms need to be communicated regarding the parameters of success. They too are accountable for the marketing success and would be held liable. They may consider opting out of RPF than hurt their credibility.
- Recognise that you are getting free advice- when initiating the RPF process, social platforms expect a fair and transparent dealing. They prove their credentials, give ideas and put in a lot of energy in responding to the proposal. So the marketers need to be appreciative of them and should give them an immediate response.
- Beware that you can be limited by who you RPF- when issuing RPF, the participants must be chosen meticulously. A wide search need to be undertaken by including different kinds of medium.
- Evaluate and plan strategically

Planning is the stepping stone to any social influence marketing campaign. Marketers need to be shrewd in identifying the audience and the platforms where they can be found. Interaction with the target customers requires a holistic approach with a keen sense of intuition. The following points need to be included for the process.

- Knowing which social platforms can extend or strengthen your brand- marketers always need to be associated with a credit-worthy platform.
- Having a sense of which social platforms are on the verge of breaking out and growing in size and scale
- Being able to separate the wheat from the chaff- identifying the perfect social media site for campaigning, in others words, separating the best from the rest.
- Thinking beyond audiences and reach- traditional online ads focussed only on the customer. But in social influence marketing, advertising should be centred around the influencers too. Their value and involvement must be considered.
- Being in it for the long run and not getting impatient- results will be reflected only after a considerable long period of wait, especially on the niche platforms. Social influence marketing requires endurance to long waits, to learn and optimize, to test, to develop relationships.
- Thinking holistically and strategically- All the marketing practices both online and offline, must be cohesive and co-ordinated. Immaterial of the size of the media platform, the marketing efforts should focus on the end result.

Moving Beyond the Platforms and the Blogosphere: There are companies who play a pivotal role in generating advertising spaces on media platforms. They are called social platform enhancers. They work closely with the marketers in identifying the motives. Some of them function like an ad agency whereas some work like a software firm which designs widgets and application for blogs and platforms.

Social advertising network: Advertising network is a platform enhancer that solicit advertisement by bringing the audience together. The network can be one application builder who controls a group of applications. In many cases, multiple application builders group together to develop a network and then solicit ads. Through these applications, ads can be placed and promotional campaigns can be undertaken on the desired social platforms. RockYou and MySpace are examples of Social advertising network

Appvertisement providers: Appvertisement providers are also platform enhancers who develop appvertisements for marketers. Appvertisements are a combination of attractive ads powered by useful and entertaining applications. These appvertisements observe a person's online activity and solicits his contributions towards developing a customised application. They are built with features that are social in nature and stimulates the people to install it and request the same to be recommended to others. The appvertisement providers work

closely with the advertisement agency to develop and assures about a certain number of installations on social advertising networks. Gigya, BuddyMedia and ContextOptional are all examples of advertisement providers.(Shin & Lee, 2012)

Blogger networks: There are more than 10 million dynamic blogs on the web out of which around 10000 have traffic. However, considering the magnitude of the bloggers, reaching them for marketing efforts will be cumbersome. In such scenario, blogger networks does the role of middlemen bridging the gap between marketer and the blogs by promoting the blogger network and managing the advertiser relations. Many blogger networks give the option of choosing audience and blogs to whom the ads need to be directed to. Some of the popular blogger networks are Federated Media, BlogHer, SixApart, to name a few.

Taking Care of the Unpaid Media Basics: Niche platforms may not always charge for ad campaigns. Though they depend on advertising for income, there are some tactics that can be adopted in the unpaid section. They may not be keen about the ads as long as they do not intrude into the privacy of the user or break the rules of the platform.

- **Wikipedia-** marketers must refrain from promoting on the main page, instead they can research on how the company or brand is portrayed in Wikipedia. Editing the own page is discouraged as it is considered conflict of interest. Comments are encouraged only on the discussion tab.
- **Flickr-** this is a photo-sharing website that behaves more like a social networking site. Anyone can post photos of the products and can tag the company. Companies can search the site to get a feel of how their products are presented on the site. However, it is advisable to have their own page to share photos and encourage others to post them too.
- **Delicious-** this bookmarking site is a space where users store their website bookmarks. Marketers just need to ensure that their corporate websites and brand sites that they own are bookmarked and tagged.
- **Digg-** it is basically a news sharing site where user can upload any interesting piece of news about the company or product. Depending on the worth, the news item may become popular resulting in free publicity.
- **Message boards-** helps in understanding the conversation that take place on the message boards. The board specifications determine the participation procedure, the type of discussion and way of dealing with errors.

Accounting for the Influencers: Having already seen in brief the three categories of influencers namely referent, expert and positional, there is a need to study each of them in a detailed manner. To begin with, let us delve deeper into expert influencers.

Basically it covers five types of people

- People in positions of power
- Individuals/ Institutions that are experts in the subject
- Media Moguls- commentators, hosts, journalists
- Cultural icons- celebrities, musicians, artists
- Socially connected people- community leaders, neighbourhood members, business networkers

Ideally, some points that need to be addressed

- Your PR department is already taking care of this- the foremost concern is whether the PR section of the company is taking care to build relationship with these expert influencers. Relationship can be nurtured online through these social platforms. Their activities and conversations can be tracked.
- You are not sure these influencers matter online- sometimes the very need to track these experts is questioned. What does the relationship with them bring into the marketing scenario for small companies? Or do they really need an influencer to promote their business? Or does the expert influencer ever care to develop a relationship with the marketer?
- You have the wrong list of influencers- the final point is the right identification of the so-called experts. People seem to trust their close circle of influencers rather than experts for their purchase decisions. And the credibility and popularity of these experts is dynamic as they keep fluctuating with time.

To sum up, expert influencers need to be first tracked, whether they fit into the 'influencer list' who can impact brand affinity, whether they can and need to be tracked online, whether a relationship need to be nurtured with them, whether existing relationships need to be trusted before approaching experts.

Reaching the Expert Influencers: There are different stages and strategies to reach out and nurture relationships

with expert influencers. Relationship can begin by introducing oneself to them, by following their tweets or commenting on their pages. As long as the experts attaches a value to the product, they will be interested in the promotion of the product. Relationship with an expert is beneficial to the marketer in the long run. Experts may get acquainted depending on the size of the business, the industry the business is associated with and the product that is required to be sold. Some guidelines to reach out the expert influencers are

- Ask your customers whom they seek out for advice- direct research with the customer on who influences them
- Pay attention to the media – follow the media about the persons frequently highlighted and maintain a database
- Look at your competitive environment- observe who the stakeholders and even competitors turn to for influence and understand those people
- Attend conferences and exhibitions- expert influencers often are invitees at conferences and seminars and they judge new products at these events. It is worth making a note of the keynote speakers
- Seek out the industry analysts- they have enormous influence on the customers who also patronize the products that they endorse. Customers turn to them during the purchase of high worth goods
- Evaluate their online footprint- by doing a research on the ranking of popular blogs gives an insight into the expertise of the blogger and the extent of influence they have on customers. There are many ranking tools like Alexa Scores, Google Page Rank, RSS subscriber numbers which are available to evaluate the blogs.
- Become an influencer yourself- by becoming a leader oneself in the company and community is the best way to become an influencer which also gives access to other influencers.

Tapping into the Referent Influencers: Until recently, referent influencers hardly existed for marketers. There was no system for identifying them or tracking their activities. But the scenario has changed and marketers have realized how important referent influencers are in purchase decision making process. Customers network with their contacts and create a social graph on the platform. Social graphs are the mapping of everyone in this world and their relationship with one another. An individual's social graph refers to those individuals who are linked to that individual and their relationship with each other. Referent influencers may be familiar or unfamiliar people. These referent influencers are a major force behind the buying decision process of an individual. Referent influencers can be categorized into anonymous influencers and known influencers.

- Anonymous referent influencers- they are people who are active on social platforms. Based on their volume of activity on social platforms they are noticed by fellow users
- Known referent influencers- they are familiar with the customers and are members in their social graph

Reaching the Referent Influencers: Marketing to referent influencers require identifying them from the customer's social graph. But it is difficult to access the social graph of users as it is violation of the privacy of the user. However there are enterprise advertising companies seeking solutions to access referent influencers without violation of privacy of the users. These methods are safe although it is expensive. But referent influencers can also be reached on sites like Facebook. By luring the referent influencers with coupons and competitions, they can be asked to encourage and influence the customers. (Fulk, Steinfield, Schmitz, & Power, 1987)

Social graph analysis: With the aid of database technologies, companies can penetrate into major social networks and access personality, their online activity, their social graph and their friends circle to identify the main influencers. Companies like Unbound Technologies, Rapleaf use parameters like friends list, persuasiveness and influence context measurement to track influencers. By overlapping email database and social graph, influencers can be identified and marketing efforts can be directed at them. (Lee, Kim, & Ahn, 2014)

Cookie data: Some technology companies analyse cookie data to evaluate relationships between people and direct the ad campaigns at them. If one group of respondents present a favourable attitude towards the ad, then the same ads are targeted at another set of people or to websites or to friends on a similar network. This enables reaching anonymous referent influencer. The limitation of this method is that this promotion can be done only if there is an advertising budget and if it is done online.

Web site behavior: A website is the perfect platform to solicit referent influencers. Starting with the most elementary activity to the most complex ones, website is the apt place for convergence and communication. Once the referent influencers are identified, marketers should ensure that they get the best service available so that they share a favourable image about the product and influence others. They can be incentivised with special offers to build a sense of loyalty.

Tapping into the Positional Influencers: The final category are the positional influencers who are the closest in relationship to the consumers and the product and purchase affects them directly. But they are the most difficult to identify on social graph. The marketers may not be aware of the role they play as it may vary with the product. The role of the positional influencer too may vary depending on the utility of the product to the buyer. For example, a positional influencer has a bigger role to play in buying a television as it will be also used by that person. Whereas, they may not be concerned when the product bought is not of much interest to them, like, a laptop for spouse's office use. But, it is difficult to identify positional influencers from referent influencers when advertising in a social media space.

Following points allow positional influencers to play the most suitable roles

- Understand the circles of influence around your customers- the people who will be most influenced or affected by the purchase decision need to be identified. Only this data helps in identifying the positional influencers. For example, in the purchase of a high worth product like a car, the spouse is the most important member the purchaser would turn to for assistance, as that person is equally impacted by the purchase of the product.
- Let consumers shape and share the experience- marketers should ensure that access to their websites is simple, in the sense, information can be acquired from the site and can be disseminated to positional influencers. The end result is, the consumers themselves showed the marketers who their influencers are.
- Articulate your product benefits for multiple audiences- marketers should not ignore the influencers at the time of marketing or selling. Once the influencers are identified, design the advertising package to the tune of the influencers too.
- Fish where the fish are- this cliché suits well in the context of buyers accompanied by positional influencers. As already discussed, the buyers themselves show who the positional influencers are. Therefore, marketers must package their campaign to target the positional influencers too, by identifying their online activities too or ensure that the buyers can reach out to the influencers by some feature enabled on the company website itself. For eg, 'Share This' options on websites.
- Badges and promotions- Consumers buy products as a need, a comfort, a status symbol, an identity or for reasons unknown. Whatever be the case, marketers must ensure that the consumers give a favourable image of the product to their peers. For this, consumers must be allowed to use a badge to show their support to the brand. They can place the badge on the blog, on user-profile or the website.

2. Putting SIM into Action

Launching SIM Campaigns: A successful SIM (Social Influence Marketing) campaign should behave in sync with other digit marketing campaigns. Marketers must work towards responding positively to criticism and crisis and strengthen the effect of the campaign to last for an extended tenure.

Discovering the Types of SIM Campaigns: A meticulous planning from the marketer's side is required for this. There are different types of campaigns and those that are distinct from those of the competitors are required to capture the attention of the customers. Some of the most commonly used SIM campaigns are listed below.

Blogger outreach: This is the most frequently use SIM campaign. The first step involves identifying the influential bloggers who are also expert influencers and own extremely popular blogs with a huge fan base. Blogger outreach programs target these bloggers and stimulate them to write positively about their product or brand. They are usually incentivised by gifting samples, sending prizes to run competitions on the blogs, inviting them to product launches, etc. Sometimes campaigns are designed to revolve around these popular bloggers. Some bloggers are however not comfortable with the attention showered and refuse compensation whereas some bloggers do not mind the undue attention. So it is important to identify where these bloggers stand in the above categories. Before deciding on the blogger for influencing the brand, a thorough study on how the blog work and the reactions of the followers of the blogger need to be analysed. A relationship can be developed after knowing the contents of the blog. (Keith & Frese, 2005)

UGC contests: Marketing campaigns keep evolving and the ones that are trending currently is centred on the user generated content (UGC). A contest is run based on the insights contributed by the participants in return for gifts. Sponsored virtual gifts: Sponsored gifts are extremely popular and a major revenue generator for social network platforms. Brands get more user engagement per dollar than through other means of campaigning. It creates a ripple effect where one user encourages other to engage and goes on. There are many virtual reward programs on social networking sites but the ones on Facebook are the most popular. Brand utilities: This works on the premise of giving the customers some utility application instead of an advertisement. When the adopted application is found useful and favourable, users think more positively about the brand. Podcasting: A podcast is a digital audio

file which is available on web syndication technologies. A podcast by itself is not a social media but assumes as one due to the facility it provides people to organise their own audio files and share them with co-users. It cannot work in isolation in a SIM campaign but works wonders when paired with other SIM campaigns. Sponsored conversations: This is the simplest and effective of all SIM efforts. These campaigns interacts with the consumers directly along with collecting other interactions and befriending a community as a whole.(Hansen et al., 2011)

2.1 Recognizing What Makes a Good SIM Campaign

A SIM campaign takes place digitally in the convenience of the user, may be on the social platforms he is conversing. SIM has changed the outlook of marketing campaigns. Previously, the users were lured into spaces dictated by the marketers. But with changing times, marketers are trying to reach to customers at their places of convenience. A few years ago, word of mouth campaigns and display advertisements were hugely popular. The marketers then concentrated on advertising and getting customer on their realms. But now, customers are demanding and do not like to be disturbed or distracted and want the campaigns to be executed at the platforms where they exist. Some of the guidelines to be noted when launching a SIM campaign are as follows.

- Define your objectives- the first and most important step in any program is understanding what to do and how to run the campaign. The objectives must clearly define where to run the campaign, who to target, time-period of the campaign and how it gels with the other marketing efforts. In short, objectives should be pragmatic and action-oriented.
- Execute for influence- the conventional marketing campaigns were aimed only at potential customers and to get the message across only to them. But in SIM campaigns, the aim is to share and influence, reciprocate and get paid for the action. In SIM campaigns, the efforts should be to engage the targeted customers and also get them to share and discuss the campaign with his peers. When the individual shares the campaign, he expects to derive a value from it in the form of offers or status rise, in the sense, the more he shares, the more generation of value is expected.
- Create partnerships- SIM campaigns are successful only when run in partnership between various sources. The campaign must comply with the rules of the media platform it intends to run on, engage with the other large brands that shares the platform and finally the user who tries to establish an ownership of the brand on the platform.
- Track the results- The success or failure of a SIM campaign can be measured in many ways. It depends on the objective, the target and the social platform here the campaign is slated to run. Ideally the measurement techniques have to be decided before the launch of the campaign. The level of influence generated, brand awareness created and if the efforts have resulted in purchase can be measured. With so many tools available in the market, the SIM campaign can be tracked on the website as well as on a physical store.

2.2 Using LinkedIn to Determine Your Objectives and Shape Your Campaign Plan: LinkedIn is an ideal platform for running a SIM campaign to reach out to like-minded professionals

Making connections in LinkedIn: Potential partners can be identified from LinkedIn Service Provider directory. From this people from specific companies can be targeted. Further those individuals who are capable of arranging an introduction with industry experts can be tracked. The following tips can be helpful during the search.

- Pay attention to people's titles- LinkedIn eases the search by briefing about the job title held by the individual and the company associated with him. LinkedIn shows whether the person is connected by one, two or three degrees.
- Join the LinkedIn groups that would appeal to your business- one of the easiest and fastest means of identifying like-minded professionals is by taking membership in a group that is relevant to the industry the marketer is associated with. By this, a lasting reference is created which helps people to identify the marketer.
- Search LinkedIn Answers for people with similar situations as yours- helps to identify people who face the same difficulty as the marketer does and gives insights regarding the people to be approached.

Getting help with your SIM campaign plan using LinkedIn. This online community enable to get practical solutions to the problems faced by professionals without incurring huge costs. Some of the guidelines to be followed to get the best out of LinkedIn are

- Ask targeted questions on LinkedIn Answers - LinkedIn is a perfect platform to solicit answers for queries, as it has many members who are experts in their respective fields.

- Watch your Question thread closely (through the My Q&A tab) and provide clarification or responses whenever needed- sometimes there may be an overload of information to a query posted. Sometimes, a clarification on the query may be required. In some cases, the questioner may need to pick a few good answers from an array of answers. This behaviour indicates a reward for the people who have attempted to clear the query. Also it gives hints on which answer suits perfectly to the query.
- Keep the conversation open and continuous- it is advisable to leave the question open-ended to enable people answering them to discuss their views and result in a reason to follow-up with them personally.
- Set up a LinkedIn Group that speaks to your target audience and your company's (or your) capabilities- whenever specific services are required to be dispersed, grouping similar profiles and staying in touch with the group, in other words, the target audience, will help in knowing them better.

Participating — Four Rules of the Game. There are four main rules that determine the success of SIM campaign.

- Be authentic- it is difficult to define authenticity on social media. In simple terms, it is being honest and transparent, literally. Some examples are
- When you set up a blog as part of your campaign, make sure that you're using your own voice- the content should never be outsourced. If need arises, ensure it is the own voice
- When you're publishing your thoughts, opinions or simply sharing information, don't do so anonymously- always reveal the identity to the consumers. People do not like to be associated with anonymous brands and people. There is an unwritten rule in social media that people build relationship with each other and authenticity is pivotal to any relationship.
- Learn from the community and respond to their feedback- feedback is vital in a social media space. The marketers should set aside their space and time to respond to positive and negative feedbacks and answer queries. Participation on social media becomes futile if there is no feedback system
- Be humane in your approach- a person online is a real human. So enough care and consideration should be given as each visitor or comment posted is unique
- Operate on quid pro quo basis- customers will not participate in a SIM campaign if they do not get anything in return. SIM campaign should entertain the customer and motivate him to share it with his contacts and give him due rewards. Success of the ad can be measured by the number of site visits, number of times it was shared and number of times visitors registered for rewards, if any. An example of SIM campaign that provided quid pro quo for its audience was that of a detergent brand that was aired on a popular television show. It was a thirty second ad, directing them to a website and requesting them to forward the video clip. For each share that viewers made, a contribution was made to charity. This was a hugely successful SIM campaign.
- Give participants equal status- marketing campaigns are aimed at people to make them have favourable feelings and feel special. This special feeling that they get enables them to participate in many online campaigns. For this, there are many virtual gifting programs. A user uses the virtual gift and will share it with his peers. This creates a chain reaction, giving and getting of gifts. This reciprocation is the success of any SIM campaign.
- Let go of the campaign- campaigns always take a new shape irrespective of who created it. After a certain point of time, customers take responsibility of moderating the campaign. Successful SIM campaigns take new directions and dimensions. By letting it go allow users to take it to newer directions. However, the creator is in control of the responses to customer involvement.

Killing the Campaign Expiry Date. Unlike the conventional marketing campaigns, there is no specific start date or an end date for a SIM campaign. A SIM campaign may not stop when the marketer wants them to. A brand might have started becoming the topic of interest for a community of people and disowning them would be the last thing that a marketer wants to do. So to divert these community of people towards a broader goal requires sharp business acumen. There are four ways to do it successfully.

- Give participants new reasons to engage with your brand- SIM campaign would have started off with a set of objectives and goals. Once they are accomplished, newer campaigns can be started to cater to this community of people.
- Encourage participants to coalesce into communities- people participate in SIM campaigns if it interests them or if they can identify themselves with the brand. Sometimes, depending on the content of the campaign, people may be interested in forming communities. Those campaigns that has generated goodwill will get converted into customer communities. These are a positive sign for the marketers and can be used for future campaigns.

- Treat participants like existing customers- there will be participants in a SIM campaign who may not have actually bought the product but would have participated actively like sharing it with friends, commenting on the blog, writing a review and testing a product. As a result, he had spent a lot of his time and energy in engaging with the product. So the marketer owes him and should be treated as a valued customer. To reward him, he may invited to try offers, invitation to be a part of focus groups or testing of a new product.
- Extend the campaign to the Web site- Mostly SIM campaigns take place on micro sites as display ads promoting them. So when the timed out, the campaign is pulled off the site. There is an abrupt end to the campaign. Instead, marketers can always promote the SIM campaign on their corporate site so that customers who have formed communities can find them there.

Monitoring Brands and Conversations. A SIM campaign must always be measured. To do this, there are many tools to measure the success of a SIM campaign. These tools help in creating the campaign, give insights on the user behaviour, what people are discussing with each other in relation to the campaigns and what the target audience is doing on the web. These tools can be divided into three categories

- High-end tools and services – gives a sneak peek into the conversations, the persons who do it and where they do it. These tools are charged based on the number of topics probed and the frequency with which data is mined.
- Low-end tools- they mainly focus on the interactions happening in a specific time period.
- Middle-of-the-road tools – they do some form of analysis but are not as powerful as the high end tools.
- To choose which tools to use, the following factors can be considered
- Your audience- if the audience is unknown and if unsure about their motivations or do not know how and where they are participating, use high end tools.
- The length of your SIM campaign- for a short campaigning targeting limited audience, high end tools are not required as it may be expensive and not worth the money.
- The size of the campaign- when targeting bigger audience high end tools are needed to track users' activities.
- Influencer identification- if the marketers are interested in paying attention to influencers, a tool that is strongest in influencer identification should be chosen.
- Regulatory considerations- when working in a regulated sector, tools that allows viewing activities anonymously should be chosen, like the high end and mid-level tools.
- Dashboard functionality- marketers may require interactive dashboards to keep track of real time conversations. There are a lot of free tools available for monitoring brands and conversations.

Responding to Criticism. Criticisms in a SIM campaign are inevitable. How much ever attractive a campaign may be, it is sure to offend a few set of people. Marketers must be prepared to face criticism and unfavourable responses from people. For this, marketers must adopt a proactive approach. A proper planning is needed at the time of the launch of a campaign regarding the handling of crisis and criticism. The PR department should be roped in for crisis handling and they should work hand in hand to respond to criticism.

A few guidelines will help in tackling criticism.

- Respond early and often- it is always best to respond to criticism at the earliest possible. People who have criticised and who have not got a proper response will feel offended leading to greater anger that can percolate throughout the web.
- Respond honestly and clearly- always adopt a genuine approach by disclosing the identity. Just as the marketer was genuine in his marketing efforts, he needs to be genuine in his responses too. Be affirmative wherever needed and apologetic when wrong.
- Be prepared to change based on the feedback- marketing will be at its best if constructive criticism is accepted and changes incorporated in the campaign. It wins hearts and trust of the participants.
- Don't hesitate to bring humour to the situation- to mitigate unpleasant feelings, a dose of humour is effective. Humorous responses are a big hit on the web and can snowball into a popular SIM campaign.
- Use the same channels for the response- never resort to any other channel or medium for giving a response to a criticism. Stick on to the same channel.

2.3 Energizing Employees within Your Company for Social Influence

Enterprise softwares were used mostly by business managers to for internal communication, handle customer relationship, knowledge management and company operations. Though these softwares were used by employees more than the managers, emphasis was placed on the needs of managers and not on the needs of the users, that is, employees. These employees were efficient enough to design softwares for their personal use and hence managers found an opportunity in this arena. The need to design consumer-centric softwares arose, resulting in Enterprise 2.0. There was a necessity to address and practice social influence marketing within the company, because before practicing it with customers, it is better to start by implementing it at the employee level and encourage them to positively influence one another.

Encouraging Your Employees to Collaborate. Andrew McAfee, a Harvard Business School professor, defines Enterprise 2.0 as the use of social software platforms within companies or between companies and their stakeholders. These softwares are built on the inputs from the internet and are used for collaborating, organising and sharing data. Specifically they function on consumer –oriented design features and the employees too are encouraged to incorporate these philosophies into their work environment.(Kim & Choi, 2013)

Energizing employees: It's nothing new. Organisations often worked on how to get the best out of their employees. Employees are encourage to collaborate and share their knowledge and expertise so that the performance is at its best and the system does not suffer, in case the employees leave the job. Employees are energised and are given opportunities to collaborate, share and motivate to enhance creativity and performance.

Rewarding teams. To create a conducive work environment, always encourage team performance rather than individual achievements. This nurtures a collaborative work environment where employees are motivated to share knowledge, learn from others and participate in social spheres.

Treating everyone equally. Constructive competition is very effective in getting the best performance out of the employees. However, there may be many employees who may be ignored from the loop. These isolated employees are demoralised and will not put in their best efforts in work. This creates a destructive situation. To avoid such a scenario, always treat employees equally and encourage them to share their grievances with the company management on platforms convenient to them.(Lee et al., 2014)

- Trusting your employees. Employees must be trusted which enable them to perform better towards achieving the business objectives. It is imperative to energise them for social influence, only then will the employees be committed and productive.
- Creating the right culture. A good and open culture is vital for any organisation to succeed. It is the duty of any company management to create a humble, vibrant and transparent work environment where employees can be encouraged to engage in meaningful discussions, learn from mistakes, open to ideas and rewards creativity and innovation.

Placing a premium on groups with a purpose. A group of people with diverse experience and ideas should be assembled together to brainstorm and come to up with a new and creative task. The diversity in the team will result in unique results.

Avoiding excessive snooping. Employees prefer autonomy and privacy in what they do. They do not like to be watched and tracked at every move they take. There should be a culture of social and intellectual conversation and engagement. Always respect them and the employees will deliver amazing performance. (Van Eperen & Marincola, 2011)

Picking Social Software for Social Influence. Businesses are bombarded with a wide range of tools and softwares that vary in cost depending on what suits the needs of the clients. Finding the right software that empowers employees for social influence can be challenging. For this four versions of softwares can be considered

Enterprise software. Employees cannot control the use of softwares in large organisations. There is a need for enterprise software upgrades that incorporate social functionality which can be used in enterprise environment or run independently.

- Microsoft SharePoint – collaboration software that integrates Microsoft Office and other Microsoft products
- SAP –handles financial, HR needs, business operations and customer
- IBM – with its web sphere portal helps develop applications that csn be disseminated through portal environment

- Telligent – community server product and integrates well with the rest of a company’s server

Emergent enterprise social software. Emergent enterprise social software products are designed to be collaboration tools incorporating the design ideas, needs and requirements of ordinary people. Ideas are obtained from social media sites like Facebook, YouTube, Wkipedia and Twitter. Confluence, Socialtext and NewsGator are new players. The software solutions are plugged into existing software environments to enable it to work efficiently. These softwares comply with the security guidelines of the companies.the software is either delivered as a service model or is shrink-wrapped. (Tsai & Men, 2012)

Small-scale social software. Smaller and cheaper softwares designed for smaller companies are called small scale social software. Google’s Application Suite is free and works well with Gmail. It shares the same user experience of Google search. Similar applications are

- Zoho- is similar to Google Application Suite but far better in features. It is Web-based encompassing related tools such as project management and a CRM software.
- Traction Software -is rich in functionality and is a combination of blogging with a wiki environment. It is a great solution for knowledge management.
- Wetpaint – a relatively simple application that is designed to ease the development of your own site, share it with a select group of people and collaborate
- 37signals has a distinct set of specific Web tools that can help in running business. From a project management application to a tool that recognises leads, it targets specific needs

Consumer social software. Consumer oriented tools can also be used for business. Platforms like LinkedIn, Facebook, Ning, Slideshare are capable of handling private groups who upload and indulge in discussions. These platforms are more secure than third party tools and plug-ins. In LinkedIn, third party plug-ins enable sharing, publishing and collaborating data within the members of LinkedIn

2.4 Applying Metrics to the SIM Realm

There is a myth that Social Influence Marketing (SIM) is relatively new to marketing and that it is impossible to be measured. The fact is SIM is as measurable as any other campaign with an array of tools and techniques. There are broader brand metrics and specific campaign or program-oriented metrics. The specific metrics can be in the form of an online community initiative, viral video campaign, a blogger reach initiative or a sharing widget. But most importantly, there has to be a correlation between these metrics with other marketing parameters. So the complexity lies in not measuring the effectiveness of the campaign but in correlating the metrics to the marketing objectives and interpreting

A Core Measure of Social Influence Marketing. Consider a single metric and map it against the Social Influence Marketing (SIM) objectives. This gives the SIM score. Unlike the Net Promoter Score which is a loyalty metric, SIM score is a brand performance metric combined with consumer interactions. But marketers are yet to come to a consensus on the ideal metric for measurement. The SIM scores give insights into the participatory nature of branding and specifically, the overall health of the brand compared to the competitors. SIM score is calculated based on two parameters.

- The reach of the brand, that is, the conversations surrounding the brand
- The consumer sentiment towards the brand, that is, the positive/negative opinions about the brand

The four important factors about SIM Score are

- This is a relative score versus your competitors- the competitors need to be chosen carefully and judiciously as they impact the score. So SIM is a subjective measurement
- The SIM score combines positive and neutral sentiment- neutral opinions too should be accounted for measuring score
- The sourcing and quality of the data that you use to compute the SIM score may directly affect the total scores- the input for calculations is obtained from the firms like Visible Technologies, TNS Cymfony, Nielsen Buzzmetrics and ScoutLabs that specialise in monitoring conversations where the brand mentions and sentiments (opinions) are analysed.
- Some monitoring vendors let you capture mixed conversations, too- these include both negative and positive opinions. Mixed conversations do not contribute towards brand and hence the number should be included in the denominator in the formula.

The data acquired from monitoring firms may not be accurate and complete. This is because they do not capture all conversations across different platforms. Platforms like Facebook do not give complete access to capture conversation. However, most of the vendors are capable of capturing conversations from major blogs, forums and community sites. So it gives a near accurate measure. Along with the actual metrics, expert opinions can be sought to determine how the brand is performing in comparison to its competitors. Wetpaint and The Altimer Group combined to develop a framework to rank the leading brands.(Armano, Trovisco, Bodzewski, Greenleigh, & Balduzzi, 2011)

Considering Influencer-Specific Metrics. It is important to measure how the brand performs on different platforms and how the influencers view them. As already discussed, the influencers play a pivotal role in the brand's image and success. How to measure the favourability of influencers is a challenging task. However, there are some tips for measurement surrounding different type of influencers.

- Expert influencers- after identifying these influencers, their online activities should be tracked to determine their comments about the brand. The conversational monitoring firms through their unique tools track the attitude of these influencers towards the brand
- Referent influencers- Companies like Unbound Technologies and Rapleaf identifies the profiles of people who mentions the brand. Then they map these too the graph to analyse if these people have influenced the target audience in some forms through their conversations or post.
- Positional influencers- firms like Clearspring and Gigya track the widgets that are downloaded. This helps in identifying the positional and referent influencers.

After tracking the influencers and their favourability towards the brand, the next step is identifying if they really are initiating conversations on vital web platforms. To measure this, Google is working towards developing an influencer rank for everyone, based on the extent of influence they have had on their co-users, where they are participating and what they are interested in.

2.5 Evaluating Each Platform's Metrics

Different measurement mechanisms exist for different social media platforms. When a SIM campaign is launched, measurement parameters can be broadly divided into four criteria.

- Traffic- Includes impressions, unique visitors and basic involvement including page views per visit.
- Demographics- profile of who visits or interacts with the brand normally includes age, gender, income, education, and location.
- Sociographic -customers' friends and their relative importance, based on their interests and their position in customers' social graphs.
- Social actions- Includes the actual social activity of the customers when they interact on the social platform specifically what they do on the social space

Tracking of competitors' metric is vital and a study of how their Facebook page, Twitter accounts and MySpace profiles engage with customers need to be analysed.

2.5.1 Facebook

If the company has a fan page on Facebook, the following parameters can be measured

- Number of fans- fans are the users on the Facebook page who have supported the brand. The more the fans the more popular the brand. On the Facebook page, the user demographic can be ascertained. Campaigns can be undertaken as it enables brands to reach a huge audience
- Page Interactions- page interactions of the fans matter a lot to the brand. Facebook helps in tracking the following metrics from a page
- Total interactions- the number of comments, posts and fan-conversation
- Interactions per post- aggregate number of comments and interactions that each post generate
- Post quality-quality of each post. Higher post quality indicates deeper engagement with the brand
- Stream CTR-stream click through rate(CTR) and engagement click through rate measure the number of people engaging with the data in newsfeed
- Discussion posts- number of topics that have come up for discussion among fans
- Reviews- number of times fans rate the page using review page application

From the profile page of Facebook user, data regarding those who have added application tab, added application profile box to their profiles, added application information section, bookmarked the application and subscribed to application mails can be obtained. Metrics like active number of users for a specific time period, canvas page views, number of unique users. Average HTTP request time, average FBML can be ascertained. The number of times the name of the brand appears in a conversation can be measured. Lexicon on Facebook gives details regarding number of conversations for the brand and advanced features like sentiments, demographic trends, pulse and location on a map is obtained. With so many metrics available, marketers should know what these imply and how it impacts business. The developers having the most installations of their applications are Zynga, Playfish, RockYou!, Slide, Inc. and LivingSocial.(Reuben, 2008)

2.5.2 YouTube and video clips

YouTube Insight gives access to details of clips published and viewer numbers. It gives the following statistics

- Views- the total number of views for the clip. Also seen by the public. The tool shows you the number of unique visitors and the number of location based views. Helps in ascertaining if the people watching the clips belong to the target market.
- Demographics-data based on age, gender, etc
- Community- people who have interacted with the clips, that is, comments, ratings, statistics which can be exported from YouTube Insights to a spreadsheet. These statistics can also be narrowed down by location or video
- However, these statistics may not be sufficient to get an accurate data. Some metrics that are provided by analytics companies are
- E-mail and embed reports-gives details on the number of times the video clip was e-mailed to someone or embedded on a blog or a Web site.
- Link intelligence- gives details on who is linking to the video clips. Links from blogs and traditional websites are accounted
- Aggregation of data: Allows viewing of aggregate statistics on several video clips at a time. For example, access of aggregate data on clips that belong to a single campaign is permitted. Also facilitates tracking of time viewed, viewer attention, per-stream quality, syndication tracking and player tracking.

2.5.3 Twitter

A lot can be measured on Twitter as it uses an open Application Programming Interface. There are many analytical tools built on Twitter to measure the reach and frequency of tweets. But the drawback is that it is impossible to identify the demographics of the audience who read the tweets and if at all the tweets are read by the target audience. Those that can be measured from Twitter are

- Brand mentions- the frequency and mentions of the brand can be scanned. This gives a picture of the volume of tweets generated surrounding the brand. TweetVolume does the job of measuring brand mentions on Twitter.
- Influence- tool like Twinfluence measures the reach, frequency, velocity and social worth of people or brand on Twitter. The potential of the brand on Twitter is measured on the basis of who retweets them, who follows the brand and who the brands follow. Twitter Grader calculates the rank of the user relative to other users.
- Pass along and click throughs- continuous scanning of tweets with brand mentions help to understand the role the influencers have played. Tweets can be tracked using tools like TweetDeck which enables multiple search terms. To monitor tweets and retweets, Tweetlist can be used. Those tweets that result in clicks to the website can also be ascertained using bitly and Tweetburner. The number of users tweeting on a time basis and leads generated through Twitter compared to other search engines are all ascertained using advanced tools. Application tools for Twitter are easy to develop as it has a user friendly and flexible API.

2.5.4 The blogosphere.

Next to Facebook, most interactions happen on blogs. There are millions of blogs with billions of posts. So identifying brand mentions from these millions of posts is challenging. There are some metrics that need to be identified from the blogosphere. They are

- Number of brand mentions compared to those of competitors
- Ratio of comments and trackbacks
- Frequency of posts and comments on the blogs of the brand as well as those on the competitors

- Ranking of the blogs mentioning the brand
- Number of conversations made by unique visitors about the brand
- Number of tweets and retweets

2.5.5 Widgets and Social Applications

Apart from those on Facebook, widgets and application on other platforms on the internet should be accounted. Some of the key metrics to be considered are

- Installs- the number of people who have installed the application
- Active users- the number of users working on the application in a given time period
- Audience profile- demographics of the users
- Unique user reach- the percentage of users who have installed the application to the total audience
- Growth- percentage increase in user number in a given time period
- Influence- number of familiar users who have installed the application
- Application/widget installation- number of widgets a user has on the profile
- Active users/ widgets in the wild- the number of people using widgets on a regular basis.
- Longevity/lifecycle- the duration of usage of an application between installation and uninstallation

Another application used to understand brand health in the social Web is Status Search This application allows search within the Twitter and Facebook contacts' statuses.

2.5.6 Website community metrics

When designing a new website for the purpose of SIM, planning the measurement tactics need to be thought about. Rather than keeping track of number of users to the website, their behaviour has to be monitored. For this, the following metrics should be accounted

- Traffic- number of people visiting the community pages or discussion pages of the website.
- Members- the number of people registered on community pages for the purpose of publishing content and reviews
- Interactivity- the number of people involved in the discussion and the frequency with which it happens
- Civility- the tone, the language and ways of expressing opinions, the mutual respect and trust
- Content- those information or posts that are worth reading and sharing

2.5.7 Other metrics to consider

To analyse SIM score, there is a need to monitor the metrics on all social platforms other than the major sites. The following should be tracked

- How much the brand and its associated Web sites are bookmarked on sites like Delicious and Flickr
- Alexa , Compete and Quantcast rankings
- Brand mentions on discussion spaces and on other community Web sites like CafeMom and the microblogging service FriendFeed

3. Suggestions and Conclusions

Social Influence Marketing (SIM) efforts may fail for numerous reasons. But there is hardly any discussion on why the campaign failed. The following practices may brighten up the chances of succeeding in SIM campaigning.

Open Up Your Brand to Your Consumers and Let Them Evolve It. Immaterial of the goodwill or popularity tag attached to a brand, marketers must learn to allow the customers direct the SIM campaign. Non-flexibility from the marketers' side in shaping the campaign of the brand may run the risk of getting alienated from the customer. Keeping the objectives and appropriateness of the method of functioning of the brand, marketers must facilitate the process of brand transformation. The more the customers are empowered to identify themselves with the brand, the more successful the SIM campaign will shape into. The transformation must be in conformity with the company values and customer expectations.

Develop a SIM Voice without Silencing Other Voices that Support Your Brand. A strong understanding of

interpersonal skills is vital for SIM campaigns. Sim campaigns must typically involve a more humane and personal touch. Exclusive one sided promotion of the brand and apathy towards critics is highly unacceptable in a SIM campaign. The idea is to reach out to the customers without ending up like a bully. Customer feedbacks and criticism should be constructively dealt with.

Respond to Everything, Even If It Means You're up All Night. From a marketers' perspective, it takes a lot of time and energy to sit through the interactions and participate in the feedback process. It is a tiresome exercise involving impatient customers from many different regions who expect prompt and timely responses to their queries, feedbacks and criticisms. Their attention is fragmented and getting to please them is a cumbersome task. To assist in managing responses, establishing a good relationship with customers online is inevitable. A good rapport should be built especially with the influencers, in case, there is a need for the marketer to go offline, influencers can take the responsibility of the role.

Think Beyond the Obvious and Use SIM to Evolve Your Business. SIM can be used in all spheres of business ranging from marketing, learning from customers, redesigning customer service, incorporating customer views in product development and change the mode of interaction with stakeholders. To assume that social influence is marketing alone, then the marketers are mistaken. Considering the fact that customer behaviour is dynamic, it is important to find creative avenues to reach customers better. Customers are influencing each other through social platforms and there is an unbelievable transformation in the ways people are creating and catering content, entertaining and getting entertained and using technology to make their lives comfortable.

Focus Not Just on Social Media but on Social Influencers. Social platforms are all about interacting with each other. Just because a brand has run a marketing campaign on social platforms does not guarantee success or sales. What is important is tracking the interactions that take place on these platforms. There are people observing and talking about the brand in the virtual space. So, marketers need to shift their focus to these influencers. These are the most powerful salesforce. The influencers have the highest brand affinity and greatest impact on customers' purchasing decisions. Marketers need to move beyond the social media shell and accommodate the influencers into their SIM campaign giving them their due priorities.

Structure Your Marketing Department for This Social World. Marketing has evolved over time and what was considered best marketing practices have become obsolete. Mere creation of eye-catching ads, print ads and display ads no longer amuse the customers. In the current context, customers look at brands in a whole new perspective. There should be online and offline presence of the brand. Marketing efforts should be structured to suit to the demands of changing customer needs. The marketing chart needs a makeover, encompassing market research, online promotions, product innovation and direct, real time feedback from customer, all integrated into the system overlapping each other.

Take Your Organization with You, from the CEO to the Field Representative. For a SIM program to succeed, everyone in the organisation, starting from the CEO to the field representative need to join hands and work together. Each employee must influence his own group of contacts and they should be empowered to be the voice of the company. A successful SIM campaign is achieved by taking every employee in this direction. The best way to start the campaign is by surveying the employees and monitoring how they are using social media to carry the efforts forward.

Conduct Many Small Tests Frequently and Build on Each One. Marketers are clueless about how to practice and succeed in SIM programs. As it is a relatively new phenomenon, it is still in the infant stage taking baby steps towards achieving success. The only way to succeed in SIM is by doing small pilot tests and evaluating the results. By learning from mistakes and incorporating the lessons learnt step by step is the ladder to success. Building relationship with the influencers and connecting deeper with the customers is a longer but a safer and assured path to success.

Capture Every Single Piece of Data that You Can. All the SIM efforts must be evaluated. The results will be known if every data gathered is measured. Capture any data related to business ranging from campaigns initiatives, strategies, number of active influencers, number of views for a video clip, decrease in customer service calls, time taken to launch a new product when customers are involved in product innovation process. Data is the ultimate tool for evaluation.

Make Mistakes, but Make Every Effort to Correct Them as Well. SIM involves live interaction with customers. So making mistakes is inevitable. But what is important is rectifying the mistakes made as quickly as possible. Otherwise, it may lead to a crisis that becomes uncontrollable. One of the main attributes that differentiates SIM from other marketing practices is that SIM involves live interaction with customers on a much larger scale. So any action is amplified on the internet. It can make or break a brand.

In spite of taking all the best efforts, SIM programs may fail. This is because marketers have failed to take enough precautions. The risks are often overlooked. In order to steer away from failure, the following ten mistakes can be avoided.

Encroaching on Customers' Time. Marketers must identify where their customers are spending time on. Customers may have conversations on the platforms they are comfortable with. Once they are accustomed to the features of the platforms, it is difficult to steer them away from it. So marketers must do a background study to find out if their customers would be interested in moving to another platform and start a conversation and manage them. Without understanding this, companies may be creating an empty community.

Your Customers Don't Want to Hear You. Social platforms are an avenue for people to interact with each other on the topics that they find interesting. It is not designed to carry out marketing activities. So brands should attempt to find out if they have permission to participate in the conversation. But the first step itself can be tricky, that is, determining how to engage with the customers, how much trust customers attribute to the brand and how favourable they view the brand. The permission of the customers is needed for engaging in interactions with them. A brand that had been isolated and serious may not get permission for participating in conversations.

Choosing the Wrong SIM Voices. The person engaged in SIM campaigns is going to be the face of the company. So the people involved in SIM campaigns should be credible, knowledgeable, a good communicator and a tech savvy. He should be able to dedicate his time and efforts for SIM conversations. Those who lack authenticity are not welcomed by the participants. An exclusive training need to be imparted underlining the SIM etiquettes.

Not Being Patient. The SIM efforts may not pay off immediately. For a brand to succeed on the social realm, it may take many months of commitment and dedication from the company's side. SIM involves interaction with customers on a real time basis. So it may not be a runaway hit instantly. Making is the customers to carry forward the marketing efforts is the primary goal. Marketers must wait patiently to witness success.

Treating SIM in Isolation. SIM initiative should not be done in isolation. It should be integrated into the other forms of marketing campaigns. SIM should always supplement the other marketing efforts. While designing SIM campaigns, care should be taken to ensure that they work well along with other forms of advertising like displays ads, print ads, TV ads and ads on mobile phones.

Having Only One Approach. When marketing to the influencers, think about the category into which the influencer falls. Referent influencers were never marketed to previously. So they have no expectations regarding this. Positional influencers are of course a big influence on the customer. With regard to expert influencers, the biggest mistake is treating them like a member of the press. The truth is that expert influencers, though share a lot in common with the people of the press, would not like to be treated like one as they operate in a real time virtual world. They appreciate the attention got but expect to work on their own terms.

Thinking of SIM as a Channel. SIM is an entirely new form of marketing and should not be treated like a traditional advertising channel. The strategies, rules and practices are entirely different from those incorporated in a conventional channel.

Don't Plan for the Worst. There may be a PR crisis at some point of time of a SIM campaign. As SIM involves real time interaction with the customers in a direct and genuine manner, there are risks involved which is invisible in traditional advertising. Risks take two forms

- Actual structure of a SIM campaign- a negative response may arise when the customers are asked to do something. The responses might turn out to be provocative or inspiring and may shadow the campaign.
- Unintentionally elicit a visceral reaction-meticulous planning of a crisis is required to prevent a negative snowball effect.

Focusing on One Large Campaign. When planning a SIM campaign, several small initiatives should be planned rather than one single initiative. SIM is about many tiny actions woven together to make an impact. As customers never stay on the same platform, exchange conversation, navigate to another to view a video and then go offline, focus should never be on one big program.

Forgetting to Reward Your Participants. Marketers should never assume that consumers participate readily and generously to online programs. They need to be incentivised and recognised for their participation. The reward is not necessary to be of monetary value. It has to match the level of participation. Rewards can be in the form of discounts, invitations to events and featuring customers on the company website.

Reference

Anon. (2000). CMM offers digital solutions. *Official Board Markets*, 76(28). Retrieved from

- <http://www.scopus.com/inward/record.url?eid=2-s2.0-0034229170&partnerID=40&md5=352066193b2137d9f09bf0f1389786d3>
- Armano, D., Trovisco, C., Bodzewski, J., Greenleigh, I., & Balduzzi, A. A. (2011). Six Social Media Trends for 2011: Interaction. *Harvard Business Review*, *89*(3), P23-25. Retrieved from <http://www.redi-bw.de/db/ebSCO.php/search.ebscohost.com/login.aspx?direct=true&db=bth&AN=58554763&site=ehost-live>
- Barrutia, J. M., & Echebarria, C. (2013). Networks: a social marketing tool. *European Journal of Marketing*, *47*(1–2), 324–343. <https://doi.org/10.1108/03090561311285574>
- Boyd, D. (2008). Why Youth ♥ Social Network Sites.pdf. *Digital Media*, 119–142. <https://doi.org/10.1162/dmal.9780262524834.119>
- Boyd, D. M., & Ellison, N. B. E. (2008). Definition of Social Networking Site: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210–230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic Word-Of-Mouth (eWOM) in social networking sites. *International Journal of Advertising*, *30*(1). <https://doi.org/10.2501/IJA-30-1-047-075>
- Fire, M., Goldschmidt, R., & Elovici, Y. (2013). Online Social Networks: Threats and Solutions Survey. *IEEE Communication Surveys & Tutorials Online*, *16*(4), 1–20. <https://doi.org/10.1109/COMST.2014.2321628>
- Fulk, J., Steinfield, C. W., Schmitz, J., & Power, J. G. (1987). A Social Information Processing Model of Media Use in Organizations. *Communication Research*. <https://doi.org/10.1177/009365087014005005>
- Gneiser, M., Heidemann, J., Klier, M., & Landherr, A. (2009). Quantifying Users’ Interconnectedness in Online Social Networks—An Indispensable *Value Creation in E-* Retrieved from <https://www.springerlink.com/index/Q24M27M6425Q7272.pdf>
- Guthrie, J., Cuganesan, S., & Ward, L. (2008). Industry specific social and environmental reporting: The Australian Food and Beverage Industry. *Accounting Forum*, *32*(1), 1–15. <https://doi.org/10.1016/j.accfor.2007.10.001>
- Hansen, D. L., Shneiderman, B., Smith, M. A., Welser, H. T., Underwood, P., Cosley, D., ... Black, L. W. (2011). *Analyzing Social Media Networks with NodeXL*. *Analyzing Social Media Networks with NodeXL*. <https://doi.org/10.1016/B978-0-12-382229-1.00015-1>
- Jiang, J. (2006). The role of culture in online organization-publics relationship building: Comparing design and content of corporate Web sites in the United States and China. ProQuest Dissertations and Theses. Retrieved from <http://search.proquest.com/docview/305263475?accountid=14549%5Cnhttp://hl5yy6xn2p.search.serialsolutions.com/?genre=article&sid=ProQ:&atitle=The+role+of+culture+in+online+organization-publics+relationship+building:+Comparing+design+and+content+of+corpora>
- Keith, N., & Frese, M. (2005). Self-regulation in error management training: emotion control and metacognition as mediators of performance effects. *The Journal of Applied Psychology*, *90*(4), 677–91. <https://doi.org/10.1037/0021-9010.90.4.677>
- Kim, D., & Choi, M. Il. (2013). A Comparison of Young Publics’ Evaluations of Corporate Social Responsibility Practices of Multinational Corporations in the United States and South Korea. *Journal of Business Ethics*, *113*(1), 105–118. <https://doi.org/10.1007/s10551-012-1285-7>
- Lee, E., Kim, Y. J., & Ahn, J. (2014). How do people use Facebook features to manage social capital? *Computers in Human Behavior*, *36*, 440–445. <https://doi.org/10.1016/j.chb.2014.04.007>
- Papacharissi, Z. (2009). The virtual geographies of social networks: a comparative analysis of Facebook, LinkedIn and ASmallWorld. *New Media & Society*, *11*(1–2), 199–220. <https://doi.org/10.1177/1461444808099577>
- Patchin, J. W., & Hinduja, S. (2010). Trends in online social networking: adolescent use of MySpace over time. *New Media & Society*, *12*(2), 197–216. <https://doi.org/10.1177/1461444809341857>
- Provost, F., Dalessandro, B., Hook, R., Zhang, X., & Murray, A. (2009). Audience Selection for On-line Brand Advertising: Privacy-friendly Social Network Targeting. *Acm*, 707–715. <https://doi.org/10.1145/1557019.1557098>
- Reuben, B. R. (2008). The Use of Social Media in Higher Education for Marketing and Communications: A

- Guide for Professionals in Higher Education. Retrieved from *Httpdoteduguru.com/wp-content/uploads/2008/08/social-media-in-higher-education* Pdf, 5(Cavazza), 1–13. [https://doi.org/10.1108/S2044-9968\(2012\)0000005018](https://doi.org/10.1108/S2044-9968(2012)0000005018)
- Shin, H., & Lee, J. (2012). Impact and degree of user sociability in social media. *Information Sciences*, 196, 28-46. <https://doi.org/10.1016/j.ins.2012.01.040>
- Tsai, W.-H. (Sunny), & Men, L. R. (2012). Cultural values reflected in corporate pages on popular social network sites in China and the United States. *Journal of Research in Interactive Marketing*, 6(1), 42–58. <https://doi.org/10.1108/17505931211241369>
- Van Eperen, L., & Marincola, F. M. (2011). How scientists use social media to communicate their research. *Journal of Translational Medicine*. <https://doi.org/10.1186/1479-5876-9-199>
- Wey, T., Blumstein, D. T., Shen, W., & Jordán, F. (2008). Social network analysis of animal behaviour: a promising tool for the study of sociality. *Animal Behaviour*. <https://doi.org/10.1016/j.anbehav.2007.06.020>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Reviewer Acknowledgements

Asian Social Science wishes to acknowledge the following individuals for their assistance with peer review of manuscripts for this issue. Their help and contributions in maintaining the quality of the journal are greatly appreciated.

Asian Social Science is recruiting reviewers for the journal. If you are interested in becoming a reviewer, we welcome you to join us. Please find the application form and details at <http://recruitment.ccsenet.org> and e-mail the completed application form to ass@ccsenet.org.

Reviewers for Volume 13, Number 4

Abdul Haseeb Chaudhary, Pakistan
Andrew Schumann, University of Information Technology and Management in Rzeszow, Poland
Arash Riasi, University of Delaware, USA
Attama Nilnoppakun, Silpakorn University IT Campus, Thailand
Chi Hong Nguyen, Can Tho University, Vietnam
Hasan Aydemir, Inonu University, Turkey
Hyung Seok Lee, Chungbuk National University, Republic of Korea
Ismail Meric, Turkish Air Force Academy, Turkey
Iuliia Pinkovetskaia, Ulyanovsk State University, Russia
Ivy Haoyin Hsieh, Tamkang University Lanyang Campus, Taiwan
Kherchi Ishak, University of Hassiba Ben Bouali De Chlef, Algeria
Krishna Chandra Mishra, Sambhram Group of Intuitions, India
Kwang Ho Lee, Ball State University, USA
Manolis Adamakis, National and Kapodistrian University of Athens, Greece
Päivi Maria Rasi, University of Lapland, Finland
Pescaru Maria, University of Pitesti, Romania
Sakip Kahraman, Canakkale Onsekiz Mart University, Turkey
Shaharuddin Md Salleh, Universiti Teknologi Malaysia, Malaysia
Siva Balan Kulandaivel Chellappan, Department of Social Sciences, AD AC & RI, Trichy, India
Teheni El Ghak, Higher Institute of Management of Tunis, Tunisia
Tsui-Yii Shih, National Taipei College of Business, Taiwan
Tugba Yilmaz, Çankaya University, Turkey
Won-jun Lee, Cheongju University, Korea
Worarak Sucher, National Institute of Development Administration (NIDA), Thailand
Yaoran Li, University of San Diego, USA

Call for Manuscripts

Asian Social Science is a peer-reviewed journal, published by Canadian Center of Science and Education. The journal publishes research papers in the fields of arts, sociology, politics, culture, history, philosophy, economics, management, education, statistics, laws, linguistics and psychology. The journal is available in electronic form in conjunction with its print edition. All articles and issues are available for free download online.

We are seeking submissions for forthcoming issues. All manuscripts should be written in English. Manuscripts from 3000–8000 words in length are preferred. All manuscripts should be prepared in MS-Word format, and submitted online, or sent to: ass@ccsenet.org

Paper Selection and Publishing Process

- a) Upon receipt of a submission, the editor sends an e-mail of confirmation to the submission's author within one to three working days. If you fail to receive this confirmation, your submission e-mail may have been missed.
- b) Peer review. We use a double-blind system for peer review; both reviewers' and authors' identities remain anonymous. The paper will be reviewed by at least two experts: one editorial staff member and at least one external reviewer. The review process may take two to three weeks.
- c) Notification of the result of review by e-mail.
- d) If the submission is accepted, the authors revise paper and pay the publication fee.
- e) After publication, the corresponding author will receive two hard copies of the journal, free of charge. If you want to keep more copies, please contact the editor before making an order.
- f) A PDF version of the journal is available for download on the journal's website, free of charge.

Requirements and Copyrights

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the authorities responsible where the work was carried out, and that, if accepted, the article will not be published elsewhere in the same form, in English or in any other language, without the written consent of the publisher. The editors reserve the right to edit or otherwise alter all contributions, but authors will receive proofs for approval before publication.

Copyrights for articles are retained by the authors, with first publication rights granted to the journal. The journal/publisher is not responsible for subsequent uses of the work. It is the author's responsibility to bring an infringement action if so desired by the author.

More Information

E-mail: ass@ccsenet.org

Website: <http://ass.ccsenet.org>

Paper Submission Guide: <http://submission.ccsenet.org>

Recruitment for Reviewers: <http://recruitment.ccsenet.org>

The journal is peer-reviewed
The journal is open-access to the full text
The journal is included in:

Australian Business Deans Council
Google Scholar
Lockss
Open J-Gate
PKP Open Archives Harvester

RePEc
SHERPA/RoMEO
The Excellence in Research for Australia
Ulrich's
Universe Digital Library

Asian Social Science Monthly

Publisher Canadian Center of Science and Education
Address 1120 Finch Avenue West, Suite 701-309, Toronto, ON., M3J 3H7, Canada
Telephone 1-416-642-2606
Fax 1-416-642-2608
E-mail ass@ccsenet.org
Website ass.ccsenet.org

