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Computerized Finger Tapping Task in Adult Unipolar Depressed Patients and Healthy Subjects: Influence of Age, Gender, Education, and Hand Dominance

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Abstract

Introduction: Current diagnostic criteria for depression include psychomotor retardation, being the Finger Tapping Test (FTT) as one of the most utilized instruments to assess fine psychomotor performance.

Method: This study aimed to compare the performance of a sample of 51 unipolar depressed patients (30 women and 21 men, with a mean age of 45.12 years old [$SD = 14.09$]) with 51 healthy controls (29 women and 22 men, with a mean age of 44.49 years old [$SD = 15.59$]) in a computerized version of the Finger Tapping Test (FTT) from the Psychology Experiment Building Language (PEBL). Another objective was to test this version's validity in comparison to other FTTs.

Results: We found significant differences between depressed patients and healthy controls. Significant effects of age and gender were found.

Conclusion: Results allowed us to identify differences in performance between the two groups, therefore this version of the FTT revealed adequate reliability values, one instrument accessible to all clinicians.

Keywords: unipolar depression, fine psychomotor performance, Finger Tapping Test, normative data

1. Introduction

Given that motor retardation is a common feature of depression (American Psychiatry Association, 2013; Caligiuri & Ellwanger, 2000), tests of fine psychomotor performance, such as the Finger Tapping Test (FTT), have been widely utilized in several studies on depression (Arnold et al., 2005; Bashir, Khade, Kosaraju, Kumar, & Rani, 2013; Caligiuri & Ellwanger, 2000; Hill, Keshavan, Thase, & Sweeney, 2004; Hueng et al., 2011; Kertzman et al., 2010; Lampe, Sitskoorn, & Heeren, 2004; Meyer et al., 2006; Rohling, Green, Allen, & Iverson, 2002; Schrijvers, Hulstijn, & Sabbe, 2008; Swann, Katz, Bowden, Berman, & Stokes, 1999) proving to be reliable to access impairments and discard malingering (Arnold et al., 2005; Rohling et al., 2002).

The FTT was developed as part of the Halstead-Reitan Battery (Halstead, 1947) and consists in a test of fine psychomotor performance, measured through self-directed manual motor speed and control (Christianson & Leatham, 2004; Strauss, Sherman, & Spreen, 2006), recurrently employed to assess impairment resulting from traumas, diseases, and other clinical conditions, such as brain injury (Arnold et al., 2005; Hubel, Yund, Herron, & Woods, 2013a; Kane, Roebuck-Spencer, Short, Kabat, & Wilken, 2007), Alzheimer's disease (Arnold et al., 2005; Dwolatzky et al., 2003, 2004; Kane et al., 2007), Parkinson's disease (Kane et al., 2007; Shimoyama, Ninchoji, & Uemura, 1990), multiple sclerosis (Kane et al., 2007; Wilken et al., 2003), mild cognitive impairment (Dwolatzky et al., 2003, 2004; Schweiger, Doniger, Dwolatzky, Jaffe, & Simon, 2003), and mental retardation (Arnold et al., 2005).

Several researchers have utilized it to assess psychomotor effects of some drugs, like antiepileptics (Aldenkamp, Van Meel, Baker, Brooks, & Hendriks, 2002), chemotherapy (Stewart, Bielajew, Collins, Parkinson, & Tomiak, 2006), and antidepressants (Bashir et al., 2013). Furthermore, many find it resourceful to detect fake symptoms in forensic contexts (Arnold et al., 2005; Hubel et al., 2013a; Rohling et al., 2002), having also been used to study the relationship between manual dexterity and performance, in order to draw inferences about the functional integrity of the two cerebral hemispheres (Hervé, Mazoyer, Crivello, Perchey, & Tzourio-Mazoyer, 2005; Peters, 1980; Schmidt, Oliveira, Krahe, & Filgueiras, 2000; Strauss et al., 2006).

The original manual of the FTT utilized a mechanical counter and a stopwatch (Christianson & Leatham, 2004): many limitations were pointed out, as it could take several hours, needing additional time for scoring and presenting results, and was exhausting for patients and too laborious for examiners (Hubel et al., 2013a). However, its efficacy still justifies its place among the most used instruments (Strauss et al., 2006). Therefore, recently, in an attempt to overcome such limitations, several computerized versions have emerged, which are able to measure the response time more precisely, requiring less time to administer, and generating instant scoring (Wilken et al., 2003). The FTT is now part of several recent batteries, such as the Computerized Neurocognitive Battery (Coleman, Moberg, Ragland, & Gur, 1997; Gur et al., 2010), the Automated Neuropsychological Assessment Metrics-ANAM^{4tm} (Kane et al., 2007; Reeves, Winter, Bleiberg, & Kane, 2007; Wilken et al., 2003), the FePsy (Aldenkamp et al., 2002; Stewart et al., 2006), and the NeurotraxTM MindstreamsTM (Dwolatzky et al., 2003, 2004; Schweiger et al., 2003).

Our aim was to study the fine psychomotor performance of depressed patients, regarding effects of age, gender, education, and hand dominance. A computerized version of the FTT from the Psychology Experiment Building Language (PEBL) (Mueller, 2013), a free access battery, was used. Another objective was to test this version's validity, comparing our results to others obtained by Christianson and Leatham (2004) and Hubel and colleagues (2013b).

According to the literature, in FTT men tap faster, younger subjects show faster tapping rates; education is related to faster motor speed, and the dominant hand performs better. Our research hypotheses are based upon these premises, as well as in the prediction that depressed patients are slower than healthy controls.

2. Method

2.1 Participants

Both studied samples, experimental and control groups, were comprised of 51 subjects each. The experimental (patients') group was composed of 30 women and 21 men, with a mean age of 45.12 years old ($SD = 14.09$), and a mean of 8.29 ($SD = 3.72$) years of education. The participants from this group were recruited in the city of Faro (Portugal), more precisely from the Department of Psychiatry and Mental Health of Hospital Center of Algarve (a state owned entity). With analogous characteristics, healthy controls comprised 29 women and 22 men, with a mean age of 44.49 years old ($SD = 15.59$), and a mean of 9.50 ($SD = 3.63$) years of education. Patients and controls did not differ significantly regarding gender ($\chi^2 = .040$, $df = 1$, $p = .841$), age ($t = .213$, $df = 100$, $p = .832$, $d = .042$), and education ($t = -1.668$, $df = 100$, $p = .099$, $d = -.330$). In respect to gender, there are no differences in age in the patients group ($t = -.816$, $df = 49$, $p = .419$, $d = -.225$) and in the healthy controls group ($t = .627$, $df = 49$, $p = .534$, $d = .172$).

Statistically, participants were divided into three age groups: (a) 17-40; (b) 41-50; and (c) more than 51 years old. Regarding education, participants were also divided into three groups: (a) up to 6 years of education; (b) 9 years of education; and (c) 12 or more years of education. We only considered the completed cycles of education (i.e., 4th grade, 6th grade, 9th grade, 12th grade, and university), but then, only three groups were considered, since there were very few elements with 4 years of education, as well as with higher education. All participants were Caucasians and Portuguese speakers.

2.2 Measures

The computerized Finger Taping Task (Mueller, 2013), a free software from PEBL Test Battery (Mueller & Piper, 2014), was performed with the left and right index fingers: five consecutive trials in each hand, with a brief rest following each trial (10-seconds), and a longer one (30-seconds) every five trials. The mean of taps was averaged over five trials for each hand.

2.3 Procedures

Each participant completed a health and demographic questionnaire and depression diagnoses were confirmed through the MINI (Mini International Neuropsychiatric Interview) (Sheehan et al., 1997) and the BSI (Brief Symptom Inventory) (Canavaro, 2007). Those with current or prior history of bipolar disorders, schizophrenia, major psychosis, or who met criteria for dementia, substance abuse, neurologic disease, including head injury involving a loss of consciousness, and subjects who did not complete the full 50-second tapping period for both fingers or reported having a problem with their hands or indicators were excluded. To discard malingering, Rey 15-Item Memory Test (15-IMT) was used (Simões et al., 2010).

This study was approved by the Hospital Center of Algarve Ethics Committee, in conformity with the Helsinki declaration. After being provided with all the information about the study, all the participants signed an informed consent statement.

All analyzes were conducted using the Statistical Package for the Social Sciences (SPSS) version 20.0. The level of significance was set at $p < .05$.

3. Results

We confirmed effects of slowing over in depressed patients, and, for both groups, significant effects of hand dominance (faster tapping in the dominant hand), gender (faster tapping in men), and age (slower tapping on participants over 51 years old).

Results showed statistically differences between total scores for depressed subjects and healthy controls, concerning both dominant (D) ($t = -4.040$, $df = 100$, $p = .001$, $d = -.800$) and Non-Dominant (ND) hands ($t = -2.873$, $df = 100$, $p = .005$, $d = -.569$). A one-way analysis of variance (ANOVA) showed significant group differences regarding education (depression D: $F(2,48) = 8.78$, $p = .001$, $\eta_p^2 = .268$; ND: $F(2,48) = 4.91$, $p = .011$, $\eta_p^2 = .170$. vs. healthy D: $F(2,48) = 7.06$, $p = .002$, $\eta_p^2 = .227$; ND: $F(2,48) = 7.06$, $p = .002$, $\eta_p^2 = .228$) and age (depression D: $F(2,48) = 5.91$, $p = .005$, $\eta_p^2 = .198$; ND: $F(2,48) = 2.96$, $p = .061$, $\eta_p^2 = .110$. vs. healthy D: $F(2,48) = 8.39$, $p = .001$, $\eta_p^2 = .259$; ND: $F(2,48) = 7.91$, $p = .001$, $\eta_p^2 = .248$). *T*-tests demonstrated significant group differences concerning gender (depression D: $t = .2167$, $df = 49$, $p = .035$, $d = .608$; ND: $t = .2721$, $df = 49$, $p = .009$, $d = .750$ vs. healthy D: $t = .2167$, $df = 49$, $p = .012$, $d = .743$; ND: $t = .2274$, $df = 49$, $p = .027$, $d = .629$) (Table 1).

Table 1. Descriptive statistics ($N = 102$)

	Dominant		Non-dominant	
	Depression ^a	Healthy ^b	Depression ^a	Healthy ^b
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Age				
17-40	56.82 (7.85)	62.57 (5.14)	48.94 (9.51)	53.94 (6.87)
41-50	50.35 (9.64)	56.56 (7.94)	44.47 (9.54)	49.43 (6.81)
+51	46.70 (8.46)	54.12 (5.74)	41.29 (8.50)	45.12 (5.84)
<i>F</i>	5.915	8.394	2.963	7.911
<i>p</i>	.005	.001	.061	.001
η_p^2	.198	.259	.110	.248
Education (grades)				
≤ 6 th	46.04 (9.35)	53.13 (6.33)	40.65 (9.25)	45.46 (5.33)
9 th	54.21 (7.66)	58.52 (6.18)	47.57 (8.94)	48.88 (6.64)
≥ 12 th	57.00 (6.88)	61.47 (6.78)	49.21 (8.16)	53.94 (7.49)
<i>F</i>	8.781	7.061	4.910	7.068
<i>P</i>	.001	.002	.011	.002
η_p^2	.268	.227	.170	.228
Gender				

Men	54.61 (9.90)	60.90 (6.63)	49.00 (10.72)	52.36 (8.28)
Women	48.96 (8.62)	55.86 (6.94)	42.03 (7.58)	47.79 (6.07)
<i>t</i>	2.167	2.621	2.721	2.274
<i>p</i>	.035	.012	.009	.027
<i>d</i>	.608	.743	.750	.629
Total Score	51.29 (9.50)	58.03 (7.19)	44.90 (9.55)	49.76 (7.39)
<i>t</i> (BS)	-4.040		-2.873	
<i>p</i>	.000		.005	
<i>d</i>	-.800		-.569	

Note. ^a*n* = 51, ^b*n* = 51, BS = Between Samples.

For demographic variables, a shared variance of 49% to both hands was found for healthy subjects (ND: $R^2 = .495$, $F(3, 47) = 15.38$, $p = .001$; D: $R^2 = .493$, $F(3, 47) = 15.25$, $p = .001$) and 35% to non-dominant hand, and 42% to dominant hand for patients with depression (ND: $R^2 = .357$, $F(3, 47) = 8.70$, $p = .001$; D: $R^2 = .429$, $F(3, 47) = 11.77$, $p = .001$) (Table 2).

Table 2. Percentage of variance accounted for by demographic variables

	Depression ^a						Healthy ^b			
	(% of variance)									
	Age	Educ	Sex	Comb	BSI-D	Comb	Age	Educ	Sex	Comb
Dominant	24 ¹	26 ¹	8 ²	42 ¹	23 ²	53 ²	22 ¹	25 ¹	12 ²	49 ¹
Non-dominant	14 ²	19 ¹	13 ²	35 ¹	34 ²	62 ²	24 ¹	26 ¹	9 ²	49 ¹

Note. ^a*n* = 51, ^b*n* = 51, ¹ $p \leq .001$, ² $p < .05$, BSI-D = Depression scale from Brief Symptom Inventory; Educ = Education; Comb = Combined.

Christianson and Leathem (2004) compared four versions of the FTT, involving minor differences in procedures and response devices, namely the Halstead-Reitan manual FTT (Halstead, 1947), the Massey University manual FTT, the Western Psychological Services Digital FTT, and a Computer FTT, having verified high correlations between the tapping scores of all four instruments, confirming the construct validity of the latter. Likewise, Hubel and colleagues (2013b) tested the validity of a novel FTT from the California Cognitive Assessment Battery (CCAB), obtaining analogous results through the comparison to the Halstead-Retain FTT, the Computerized Finger Tapping, the T3 Computer-assisted Finger Tapping Task, the Western Psychological Services Electronic Tapping Test, and the Computerized Neurocognitive Scanning Vital Signs (CNSVS).

Similarly, aiming to validate the FTT from the PEBL Test Battery (Mueller, 2013; Mueller & Piper, 2014), we compared our study's results with those obtained by Christianson and Leathem (2004) and Hubel and colleagues (2013b) and confirmed similar results regarding mean tapping rates in three studies ($ANOVA$ D: $F = .890$, $df = 2$, 1.653 , $p = .411$; ND: $F = .502$, $df = 2$, 1.653 , $p = .606$) (Table 3).

Table 3. Comparison of the FTT from PEBL to other tapping test data

	Dominant		Non-dominant	
	Current Study ^a	Christianson (2004) ^b	Current Study ^a	Christianson (2004) ^b
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Total Score	58.03 (7.19)	56 (7.1)	49.76 (7.39)	49.6 (5.4)
<i>t</i>		1.610		.145
<i>p</i>		.109		.884
<i>d</i>		.284		.024
	Current Study ^a	Hubel (2013b) ^c	Current Study ^a	Hubel (2013b) ^c
	<i>M (SD)</i>	<i>M (SD)^d</i>	<i>M (SD)</i>	<i>M (SD)^d</i>
	<i>M (SD)</i>	<i>M (SD)^d</i>	<i>M (SD)</i>	<i>M (SD)^d</i>
Total Score	58.03 (7.19)	56.3 (9.6)	49.76 (7.39)	50.4 (8.5)
<i>t</i>		1.274		.531
<i>p</i>		.202		.595
<i>d</i>		.203		-.080

Note. ^a*n* = 51, ^b*n* = 86, ^c*n* = 1.519, ^d1st 10-sec. average.

4. Discussion

As in previous studies, men tapped faster than women (Arnold et al., 2005; Ashendorf, Vanderslice-Barr, & McCaffrey, 2009; Bornstein, 1985; Christianson & Leathem, 2004; Coleman et al., 1997; Elias, Robbins, Walter, & Schultz, 1993; Gur et al., 2010; Heaton, Miller, Taylor, & Grant, 2004; Hubel et al., 2013a, 2013b; Mitrushina, Boone, Razani, & D'Elia, 2005; Peters, 1980; Peters & Campagnaro, 1996; Ruff & Parker, 1993; Schmidt et al., 2000; Ylikoski et al., 1998), outperforming women by three to five taps (Ashendorf et al., 2009; Mitrushina et al., 2005). Heaton and colleagues (2004) reported that about 16% to 20% of the test scores were accounted for by gender. Our results showed gender differences for depression and healthy groups. Nicholson and Kimura (1996) analyzed gender differences regarding manual speed and concluded that men's speed advantage might be explained by a relative gain in the amount of fast-twitch muscle at puberty. Ruff and Parker (1993) suggested that gender differences in FTT performance may also be a reflection of different age effects, hypothesis contradicted with our study because in our sample there are no age differences between genders.

The FTT has been reported to be sensitive to changes related to aging (Ylikoski et al., 1998). Better performance is usually associated with younger age, as many studies have shown older subjects tend to have significantly slower tapping rates (Aoki & Fukuoka, 2010; Ashendorf et al., 2009; Bartzokis et al., 2010; Bornstein, 1985; Elias et al., 1993; Gur et al., 2010; Hubel et al., 2013a, 2013b; Ruff & Parker, 1993; Shimoyama et al., 1990; Turgeon, Wing, & Taylor, 2011; Ylikoski et al., 1998). To Bartzokis and colleagues (2010), age-related trajectory of finger tapping speed can be associated with brain myelin integrity, reaching its peak in mid-life and declining in older age, eventually leading to psychomotor slowing. Heaton and colleagues (2004) reported in their large normative sample (aged 20-85 years) that about 16% to 18% of the variance in finger tapping scores was accounted for by age. We also verified age-related effects, with older subjects performing poorly, with variance in the scores between 14% to 24% in both samples (depression and healthy groups).

We noticed effects of education on tapping speed. Nevertheless, according to Strauss and colleagues (2006), results on motor tasks have a propensity to be very modestly influenced, if at all, by such factors. Heaton and colleagues (2004) verified that education accounts for only about 2% to 4% of the variance in tapping scores. Still, as reported by other studies, best performances are often associated with more years of education, concerning not only higher levels of formal instruction (Ashendorf et al., 2009; Bornstein, 1985; Gur et al., 2010; Ruff & Parker, 1993), but also parental education (Gur et al., 2010).

Consistent with many reports (Hervé et al., 2005; Hubel et al., 2013a, 2013b; Peters, 1980; Schmidt et al., 2000; Teixeira, 2008; Todor & Smiley-Oyen, 1987), we corroborated considerable differences between the dominant and the non-dominant hands regarding both groups. Tapping performance has been employed as an indicator of hand dominance (Ashendorf et al., 2009; Hervé et al., 2005; Hubel et al., 2013a, 2013b; Peters, 1980; Ruff & Parker, 1993; Schmidt et al., 2000; Teixeira, 2008; Todor & Smiley-Oyen, 1987), with the dominant index finger

typically producing approximately 10% more taps (Ashendorf et al., 2009; Hubel et al., 2013b). In the FTT, the preferred hand tends to perform more quickly, and regularly (Peters, 1980), and precisely (Todor & Smiley-Oyen, 1987). This may be explained by differential effects of fatigue (Peters, 1980).

Also comma as expected (Bashir et al., 2013; Hill et al., 2004; Hueng et al., 2011; Kertzman et al., 2010; Lampe et al., 2004; Rohling et al., 2002; Swann et al., 1999), we found significant impairment in psychomotor speed between unipolar depressed subjects and controls. Psychomotor performance in depressed subjects may be further influenced by other factors, such as hospitalization status/duration, severity, subtype and duration of depression, and medication (Bashir et al., 2013). Many studies have addressed specifically effects of medication on psychomotor speed (Aldenkamp et al., 2002; Bashir et al., 2013; Stewart et al., 2006). First-line medication for depression often includes substances (e.g., fluoxetine, venlafaxine, and paroxetine) liable to affect cognitive and function performance (Bashir et al., 2013). Bashir and colleagues (2013) verified a significant speed impairment regarding patients on antidepressants. Therefore, there are researchers (e.g., Hueng et al., 2011; Meyer et al., 2006; Swann et al., 1999) who chose to study only drug-free depressive subjects to access more precisely the actual impact of the illness itself on psychomotor function. This may represent a limitation to our study, but, for ethical reasons, we could not assess the clinical sample of medications.

In order to share these initial data, we present a percentile tables of the present sample, healthy subjects (Table 4) and depressive subjects (Table 5).

Table 4. Percentile of healthy subjects by age and gender

	Dominant					Non-dominant					
	Age			Gender		Age			Gender		
	17-40	41-50	More than 51 years	M	W	17-40	41-50	More than 51 years	M	W	
5	53.00	40.00	45.00	49.15	42.50	41.00	37.00	38.00	40.00	37.50	5
10	54.00	47.00	47.80	50.00	49.00	47.00	40.50	39.40	40.60	41.00	10
25	60.00	52.00	50.00	56.25	52.00	48.00	44.50	42.00	44.00	43.00	25
50	63.00	55.00	53.00	62.00	54.00	53.00	48.50	43.50	53.00	47.00	50
75	64.00	62.50	59.50	63.25	60.50	58.00	55.50	49.25	59.25	52.00	75
90	71.00	70.60	63.90	70.70	66.00	66.00	59.60	55.10	64.50	58.00	90
95	-	-	-	73.55	70.00	-	-	-	66.85	59.50	95

Note. $n = 51$.

Table 5. Percentile of depressed subjects by age and gender

	Dominant					Non-dominant					
	Age			Gender		Age			Gender		
	17-40	41-50	More than 51 years	M	F	17-40	41-50	More than 51 years	M	F	
5	44.00	33.00	31.00	33.90	31.55	33.00	29.00	26.00	30.60	27.65	5
10	48.00	33.80	31.80	43.20	33.10	38.60	33.00	29.20	36.20	30.30	10
25	51.50	45.00	43.50	48.50	45.00	43.50	37.00	36.50	41.00	36.75	25
50	55.00	50.00	48.00	51.00	49.50	47.00	43.00	40.00	48.00	42.00	50
75	61.50	56.50	52.00	61.00	55.00	53.00	50.00	47.00	55.50	47.50	75
90	73.00	67.00	58.40	71.80	60.90	68.60	60.40	54.60	67.60	51.90	90
95	-	-	-	73.00	62.00	-	-	-	70.70	54.80	95

Note. n = 51.

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The Effect of Put Option Issuing on Risk Adjusted Return

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Abstract

This research investigates the relation between put option issuing and risk adjusted return in Iran capital market for the period 2002-2016. Because data were not available before 2002, data from the period 2002 to 2016 were studied. All data gathered from Tehran Stock Exchange database the sample include 36 issuing events. The Event Study method was implied for 5 days. The empirical result shows that there is a significant relation between issuing options and abnormal return for the company stock, furthermore there is an approved relation between that abnormal return and stock liquidity, but the relation between option volume and that rerun was not approved.

Keywords: option, embedded put option, risk adjusted return

1. Introduction

Stock put option is one of financial derivatives that stock holders may use it for hedging strategy so their stock return can be safe in down ward market and by the mean time help the company to protect its stock price in market and protect it from overselling.

Since issuing new financial instrument may change investor's opinion about the future of company and its performance (and by its turn change the stock price), it is important to investigate the effect of issuing financial instrument on stock price volatility.

In Iran capital market the put options have been issued for several time since 2012 in Tehran Stock Exchange (TSE) listed companies.

This research is the first one to investigate the effect of option issuing on risk adjusted return for TSE listed companies.

This section is followed by section 2, literatures review and in section 3, data and analysis and finally by section 4, the conclusion.

1.1 Literature Review

Conventional put option: this type of derivatives is one of the most applied financial modern instruments.

In contrast to Future and Forward contracts (in which both sides are required to perform the contract) this instrument give the holder, the right (not obligation) to exercise the contract. The difference between a right and an obligation is that a right needs to be exercised if it is in the interest of the holder, and it need not be exercised if it is not beneficial for him. An obligation, on the other hand, mandates him to take the required action, irrespective of whether or not he stands to benefit (Parameswaran, 2011, p. 343).

There are two types of option. A call option gives the holder the right to buy the underlying asset by a certain date for a certain price. A put option gives the holder the right to sell the underlying asset by a certain date for a certain price. The price in the contract is known as the exercise price or strike price; the date in the contract is known as the expiration date or maturity. American options can be exercised at any time up to the expiration date. European options can be exercised only on the expiration date itself. Most of the options that are traded on exchanges are American. In the exchange-traded equity option market, one contract is usually an agreement to buy or sell 100 shares. European options are generally easier to analyze than American options, and some of the

properties of an American option are frequently deduced from those of its European counterpart (Hull, 2015, p. 9).

Potentially, however, a market participant may be happy to accept a higher price for an asset he or she is selling, but wants to avoid the possibility of lower prices. Alternatively, a purchaser of oil may be quite happy with lower prices, but wants to avoid higher prices. Both of these possibilities can be catered for with option contracts, which typically convey the right but not the obligation to buy (or sell) an asset at a pre-specified strike price K at some known time in the future (Clark, 2014, p. 44).

Iranian Put Option (Tabaee Put Option): this contract is a kind of embedded put option which in accordance to regulations governing defined as an option by which the put option of a specified number of underlying shares at the "exercise price" determined in the "Issuing Announcement" at the exercise date is given to its buyer. Since it can't be exercise before the exercise date, it is a kind of European put option this type of options doesn't have a secondary market and the buyer shall not be allowed to buy the embedded put option bonds in excess of the number of underlying shares in his possession. Thus, the number of valid embedded put option bonds at the end of each trading day shall add up to a maximum equivalent of the shareholder's asset in the underlying shares. If the number of embedded put option bonds owned by the shareholder exceeds the number of underlying shares possessed by him, the surplus embedded put option bonds shall be cancelled whilst the issuer shall be under no obligation thereupon (SEO Board of Directors, 2014).

TSE first option issuing experience occurred in 2012.

And till now there were 45 option issuing.

1.2 Previous Studies

The CBOE study suggested that option trading decreases the price volatility of the common shares, apparently because option positions are hedged with opposite positions in the related equity (and vice versa). Hayes and Tennenbaum study indicated that the presence of option contract activity increases the trading volume of the underlying common shares (Hayes & Tennenbaum, 1979).

Jennings and Starks examined the stock price adjustment to the release of quarterly earnings using samples of firms with and without listed options. They found the two samples exhibit different adjustment processes, with the non-option firms requiring substantially more time to adjust (Jennings & Starks, 1986).

Skinner examined the variance of returns on common stocks around the time exchange-traded options were listed on these stocks. The evidence indicated that stock return variance declined after options listing. In addition, stock market trading volume increased, on average, after options were listed on firms' stocks (Skinner, 1989).

Conrad examined the price effect of option introduction from 1974 to 1980. She found that the introduction of individual options causes a permanent price increase in the underlying security, beginning approximately three days before introduction (Conrad, 1989).

Ho and Liu research results indicated that positive cumulative excess returns begin at least 100 days prior to the option introduction day. Starting from day-3 relative to introduction, however, the price behavior is dominated by a series of negative excess returns. The cumulative excess returns continue to drift downward for at least 100 days after the introduction day. In addition, the price effect is accompanied by an increase in trading volume (Ho & Liu, 1997).

Kumar and Sarin find that option listings were associated with a decrease in the variance of the pricing error, and an increase in the relative weight placed by the specialist on public information in revising prices for the underlying stocks. They also found that there was a decrease in the transaction size after option listings. Overall, their results suggested that option listings improved the market quality of the underlying stocks (Kumar, Sarin, & Shastri, 1998).

Sorescu in a research "The Effect of Options on Stock Prices" found that there is a positive abnormal returns for options listed during 1973 to 1980. By contrast, he found negative abnormal returns for options listed in 1981 and later (Sorescu, 2000).

Based on the asymmetric information and complete market hypotheses, Chena and Changb attempted to explain the impact of listing stock options on the abnormal return, volatility, trading volume and market depth of the underlying securities in Taiwan. The empirical results found that positive abnormal returns existed, the degree of volatility decreased, trading volume increased and market depth also increased following the introduction of the stock options (Chena & Changb, 2008).

Yu et al. concluded that option introduction still has significant beneficial effects on stocks' trading and informational environment, even in a world where the great majority of large stocks have already been optioned (Yu, Tandon, & Webb, 2010).

Jneter et al. in a research "security issue timing: what do managers know, and when do they know it" found that in the 100 days following put option issues, there is roughly a 5% abnormal stock return (Jenter, Lewellen, & Warner, 2011).

Because of tax materiality, it is common for firms to issue or purchase options on the firm's own stock (McDonald, 2004).

Companies have collected billions in premiums from privately sold put options written on their own stock, yet almost all of these puts expired worthless and their owners lost money as a result. Although these losses seem puzzling, Gyoshev et al. model how by offering to buy put options from better informed parties, investment banks receive private information about the issuing company. Empirically, they find a 12% increase in the stock prices and a 40% increase in the trading volumes around the put sales (Gyoshev, Kaplan, Szew, & Tsetsekos, 2016).

2. Methods

2.1 Research Hypotheses

Research main Hypothesis: Embedded put option issuing has a significant relation with stock risk adjusted return.

Research first subsidiary Hypothesis: The abnormal risk adjusted return (after the event of the put option issuing) has a significant relation with stock liquidity.

Research second subsidiary Hypothesis: The abnormal risk adjusted return (after the event of the put option issuing) has a significant relation with the volume of the put option issuing.

2.2 Research Variables

Independent variables: to test the main Hypothesis, this variable is the put option issuing which is considered as an event. To test the first subsidiary Hypothesis this variable is the stock liquidity which is released quarterly by the Securities and Exchange Organization in Iran and finally to test the second subsidiary Hypothesis this variable is the valium of put option issuing to calculate this figure, the minimum volume which the issuer committed to issue is divided by total share number of the relevant company.

Dependent variables: for all Hypotheses the dependent variable is the abnormal risk adjusted return after issuing the put option.

2.3 Sample

Among all 45 events (issuing embedded put option), the sample is chosen in accordance to below conditions:

- 1) The data of stock's return must be available for 500 trading day before the issuing (in addition, to do robustness test, 200 trading day is considered).
- 2) The stock return must have a significant relation with the market return (β coefficient must be statistically accepted in at least 95% confidence level).
- 3) The stock must be traded throw 5 day Event Window (for robustness test, 9 day Event Window is considered).

By considering these conditions 34 events have been chosen as the sample.

2.4 Research Process

Expected Return ($\hat{R}_{i,t}$) Calculation: to calculate expected return, first: β coefficient is calculated for each share by regressing 500 daily stock return ($R_{i,t}$) on market return, prior to the event (model 2).

Model 1: calculation of daily returns ($R_{i,t}$):

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$$

$P_{i,t}$: Stock i price (and to calculate $R_{m,t}$, $P_{i,t}$ is the market index value) in day t.

Model 2: calculation of stock's beta coefficient (β_i):

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_i$$

$R_{m,t}$: Market daily return in day t.

After calculating the beta coefficient and getting risk free rate of return (R_{rf} : which is announced yearly by central bank of Iran), by using model 3, the expected return is calculated for Event Window include 5 days (one day before the event which is referred by N1, the event day which is referred by Z and 3 days after the event which are referred by P1 to P3).

Model 3: calculation of stock I expected return ($R_{E,t}$):

$$R_{E,t} = R_{rf} + \beta_i R_{m,t}$$

Abnormal Risk Adjusted Return ($AR_{i,t}$) Calculation: this figure is calculated by using the model 4.

Model 4: calculation of stock's Abnormal Risk Adjusted Return ($AR_{i,t}$):

$$AR_{i,t} = R_{i,t} - R_{E,t}$$

$R_{i,t}$: Stock i real return in day t (calculated by model 1).

Accumulated Abnormal Risk Adjusted Return ($AAR_{i,t}$) Calculation: Finally by using model 5 the accumulated abnormal return is calculated.

Model 5: calculation of stock i accumulated Abnormal Return ($AAR_{i,t}$):

$$AAR_{i,t} = AAR_{i,t-1} + AR_{i,t}$$

For the first day the $AAR_{i,t}$ is equal to $AR_{i,t}$

3. Results and Findings

3.1 Descriptive Statistic

The descriptive statistic for calculated accumulated abnormal return is given in Table 1.

Table 1. Accumulated abnormal return descriptive statistic for 5 days

Even Window Day	Number	Mean	Standard deviation
p3	34	-0.01401	0.03145
p2	34	-0.01567	0.03765
p1	34	-0.0112	0.03713
z	34	-0.0085	0.02814
n1	34	-0.00267	0.01855

In Table 2, the descriptive statistic for accumulated abnormal return (at the end of event window) and stock liquidity and volume is presented.

Table 2. A accumulated abnormal return, liquidity and volume

Variable	number	min	max	mean	Standard deviation
$AAR_{i,t}$	34	-0.0807	0.0746	-0.0140	0.0314
Liquidity	34	0.0014	0.0661	0.0123	0.0143
Volume	34	0.0400	0.7000	0.2201	0.1391

3.2 Empirical Tests

Research main Hypothesis test: to test this hypothesis, one sample t-test is used. This technic makes inference about a population mean based on a single sample. The basic null hypothesis (statistic hypothesis) is that the population mean is equal to a hypothesized value, with the common alternative hypotheses (statistic hypothesis) that the population mean is not equal to the hypothesized value. For this research the hypothesized value is equal to zero, so:

$H_0: \mu = 0$: the reseach main hypothesis would be rejected.

$H_1: \mu \neq 0$: the reseach main hypothesis would be accepted.

To decide about statistic hypothesis acceptance, T value and its relevant Sig must be calculated then Sig will be compared with Significance Level (since, at this research Confidence Interval of the Difference is 95%, so the Significance Level is equal to 5%).

If Sig will be equal or less than Significance Level, statistic null hypothesis (H_0) would be rejected and the alternative hypothesis (H_1) would be accepted; if so, it means that the research main hypothesis would be accepted by the other word embedded put option issuing has a significant relation with stock risk adjusted return.

If Sig will be more than Significance Level, decision about hypothesis, would be reversed.

The test output is showed in Table 3.

Table 3. One-sample t-test result to test the main hypothesis

Window Days	Mean Difference	T	Sig.
p3	-0.01401	-2.598	0.014***
p2	-0.01567	-2.428	0.021
p1	-0.01120	-1.760	0.088
z	-0.00850	-1.762	0.087
n1	-0.00267	-0.841	0.407

***: Accepted by 99% confidence.

According to the result, for 5 days Event Window, T value is equal to -2.598 and its relevant Sig is 0.014, so, H_0 would be rejected and the research main hypothesis is accepted.

The negative relation may exist because of low market experience about this financial instrument or others investors' behavioral factors in down ward market.

Research first and second subsidiary Hypotheses: to test these hypotheses, the below regression model (model 6) will be run in which the dependent variable figure is accumulated abnormal return at the end of window (day P3).

Model 6: regression model to test the subsidiary Hypotheses

$$AAR_t = \alpha_0 + \beta_1 X_{1,t} + \beta_2 X_{2,t}$$

$X_{1,t}$: Put option issuing volume.

$X_{2,t}$: Stock liquidity for the year prior to issuing.

The basic null hypothesis (statistic hypothesis) is that the coefficient is equal to a hypothesized value, with the common alternative hypotheses (statistic hypothesis) that the population mean is not equal to the hypothesized value. For this research the hypothesized value is equal to zero, so:

$H_0: \beta_i = 0$: the reseach subsidiary hypothesis would be rejected.

$H_1: \beta_i \neq 0$: the reseach subsidiary hypothesis would be accepted.

To decide about statistic hypothesis acceptance, T value and its relevant Sig must be calculated then Sig will be compared with Significance Level (since, at this research Confidence Interval of the Difference is 95%, so the Significance Level is equal to 5%).

If Sig will be equal or less than Significance Level, statistic null hypothesis (H_0) would be rejected and the alternative hypothesis (H_a) would be accepted; if so, it means that the research subsidiary hypothesis would be accepted by the other word there is a significant relation between the dependent (stock abnormal return after the issuing) and independent variables (issuing volume/stock liquidity).

If Sig will be more than Significance Level, decision about hypothesis, would be reversed. The regression result is presented in Table 4.

Table 4. Result of regression

Variable	Coefficient	S.E.	T value	Sig.
Volume ratio	-0.2787	0.3548	-0.7855	0.4379
Liquidity ratio	-0.0542	0.0257	-2.1097	0.0428**

DW: 2.2 **: Accepted by 95% confidence.

According to the result, for first variable, T value is equal to -0.7855 and its relevant Sig is 0.4379 and for the second variable, T value is equal to -2.1097 and its relevant Sig is 0.0428; so, for the first Hypotheses H_0 would be accepted and for the second one it would be rejected. By the other word, research first subsidiary hypothesis would be rejected and the second one would be accepted.

3.3 Robustness Test

In previous section to test the research main hypothesis, data from 500 trading days was used in an Event Window including 5 days. In this section the result of one sample T-test is presented again but in Table 5 data from 200 trading day (for calculation stock's beta) in an Event Window including 5 days and in Table 6 data from 500 trading day in an Event Window including 9 days is used.

Table 5. One-sample T-test result by using 200 trading day data

Window Days	Mean Difference	T	Sig.
p3	-0.01076	-2.172	0.037**
p2	-0.01381	-2.414	0.021
p1	-0.0098	-1.8	0.081
z	-0.0076	-1.89	0.066
n1	-.00171914	-.551	0.585

** : Accepted by 95% confidence.

According to the result, for 5 days Event Window, T value is equal to -2.172 and its relevant Sig is 0.037, so, H_0 would be rejected and the research main hypothesis is accepted again but the confidence level is decreased from 99% to 95%.

Table 6. One-sample T-test result with the 9 day window

Window Days	Mean Difference	T	Sig.
P5	0.01538-	1.707-	0.098
P4	0.01737-	2.110-	0.048
p3	0.01993-	2.182-	0.037
p2	0.02025-	1.928-	0.063

p1	0.01622-	1.491-	0.146
z	0.01385-	1.405-	0.170
n1	0.00879-	1.012-	0.319
N2	0.00788-	1.246-	0.222
N3	0.00563-	1.344-	0.189

**: Accepted by 95% confidence.

According to the result, for 9 days Event Window (including 3 trading day prior to issuing day, issuing day and 5 trading day after issuing), T value is equal to -1.707 and its relevant Sig is 0.098, so, in 95% confidence H_0 would be accepted and the research main hypothesis is rejected but if the confidence level is decreased from 95% to 90%, H_0 would be rejected and the research main hypothesis is accepted again.

4. Discussion and Conclusions

This research investigated the relation between Iranian embedded put option issuing and stock's abnormal return as the main research hypothesis. The result finds that there is a significant negative effect of the issuing on the return. As it mentioned this effect exist because of investors behavioral factor in a down ward market another possible reason would be that these financial instruments are in their fancy age in the Tehran stock market.

As subsidiary hypotheses, the relation between the volume ratio of the put option issuing and stock liquidity ratio (as independent variable) and that abnormal return was investigated. The finding showed that there is no significant relation between issuing volume ratio and that abnormal return but there is a significant relation between stock liquidity and that abnormal return.

For future study the relation between the put option expiration and stock return is suggested.

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The Impact of Neurofeedback-Based Therapy on Reducing Test Anxiety and Shyness of Female Students at Competitive Examination Level

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Abstract

The main objective of this study was to evaluate the effect of neurofeedback-based treatment in reducing test anxiety and shyness of female students at competitive examination level in Ahvaz. The sample consisted of 40 students at competitive examination level that were selected by available sampling method from students referred to Ahvaz Aramesh counseling clinic, which were randomly divided into two experimental (n=20) and control (n=20) groups. The tools used were Friedman Test Anxiety Questionnaire (1997) and Stanford Shyness Questionnaire (1997). The experimental group received fifteen 30-minute sessions (three sessions per week) of neurofeedback treatment program. The study design was a semi-experimental and pretest-posttest one with control group. The results obtained using analysis of variance (ANCOVA) at significance level of $\alpha=0.05$ showed that the neurofeedback-based therapy has an impact on reducing test anxiety and shyness of female students at competitive examination level in Ahvaz.

Keywords: neurofeedback treatment, test anxiety, shyness

1. Introduction

Today, much research has been done on treatment of epilepsy by neurofeedback with reports indicating about 70% of patients' treatment and 82% reduction of sudden seizures in patients under treatment. Although most patients continued taking the drug after neurofeedback, but neurofeedback has led to a 90% reduced risk of attacks (Ghoshoni, 2016). Also, anxiety a part of every human life, exists in everyone in a balanced level, which is seen as an adaptive response. Thus, one can argue that if there was no anxiety, all of us would fall in sleep behind our desks. Lack of anxiety may lead us facing with considerable difficulties and dangers. Therefore, anxiety as a part of every man's life comprises one of the components of his personality structure. From this point of view, some of the anxieties of childhood and adolescence can be considered normal and their positive effect on the process of development (transformation) may be accepted. In other words, one can say that anxiety creates construction and creativity in people in some cases. On the contrary, there is a morbid anxiety, since some level of anxiety can be constructive and useful that most people have to experience it, but it may also become chronic and persistent; in such case, not only the response cannot be considered adapted, but it should be seen as a source of the individual's failure and desperation that deprives the person from a major part of his possibilities, meanwhile developing a wide range of disorders from known anxiety disorders to unjustified fears and frights (Dadsetan, 2012). Anxiety is a term to express normal feelings experienced by people while facing with fear, danger, or pressures and stresses (Safooraii Parizi, 2016). Feeling anxious in these situations is right, and we usually feel anxious for a short time. Test anxiety is a special kind of anxiety that is characterized with physical, cognitive and behavioral symptoms when preparing for exams and doing tests. It turns to a problem when the high level of such anxiety interferes with preparing for the exam and doing the test (Latas et al., 2010). Addressing the phenomenon of shyness and its psychological foundations seems to be important as almost all of us have had some experiences of shyness in different situations. But more importantly, some people become subject to significant shyness in all social terms and situations. Thus, one can say that the vast majority of people have somehow experienced shyness in some points of their social life. Neurofeedback is a new and highly

effective treatment technology. This treatment was first used in America, and by revealing its positive effects, it has spread to Europe and the rest of the world. Very good and long-lasting therapeutic effects, lack of negative side effects and short period of treatment compared to other treatments led to approval of this treatment method by the American Food and Drug Administration. Neurofeedback treatment is currently used on a wide range of mood and cognitive disorders. Recording EEG, neurofeedback prepares the brain function as computerized information and provides such physiological information, which represent through brain waves (Schwartz & Andrasik, 2003). When people have normal anxiety levels, blood flow supply and activity of certain areas of the brain associated with attention, focus and learning become more and better. However, when anxiety is severe and disproportionate, it would adversely affect the individual's academic performance. Then, at the time of learning time, the individual will have no focus and attention and anxious; he cannot start or finish his homework; his ability to recall things from memory and using them at tests and exams will reduce, and cannot sleep well at nights, and such insomnia will lower his focus and attention.

In a study, Jahanian Najafabadi et al. (2014) investigated the effect of neurofeedback training on reducing anxiety in those referred to the counseling and psychological services clinic in the city of Isfahan. The results of analysis of covariance showed that neurofeedback training is effective in reducing anxiety, and indicated that neurofeedback can significantly reduce the anxiety of participants in the research. In a study, Narimani, Rajabi and Delavar (2014) investigated the effects of neurofeedback on reducing symptoms of hyperactivity and attention deficit in students. The results indicated the efficacy of neurofeedback as a therapy approach in the treatment of attention problems and reduced hyperactivity symptoms among female students with attention deficit-hyperactivity disorder compared with the control group. In a research, Yaghoubi et al. (2009) did a comparative study on the effectiveness of neurofeedback, Ritalin and a combined therapy in reducing symptoms in children with hyperactivity attention deficit disorder. The results showed that the combined approach of neurofeedback therapy associated with Ritalin is more effective than each of these methods alone. The effectiveness rate of neurofeedback was as Ritalin; although parental satisfaction rate (reflected in the Connors posttest scores) of neurofeedback method was more than medication.

Wang et al. (2013) performed a study as "Biofeedback improves the high rate of biasing trait in anxious individuals". Biofeedback significantly reduced attentional bias trait in the anxiety of subjects.

Doric et al. (2012) performed a study entitled as "Neurofeedback in treating children and adolescents with ADHD". In their study, 91 children and adolescents in terms of age, gender, intelligence and random distribution of ADHD symptoms were examined. Parental reports showed a significant effect of the treatment used. Zhoe et al. (2009, quoted by Jahanian Najafabadi et al., 2014) studied the effectiveness of neurofeedback and biofeedback on academic performance of a group of student. The study findings showed that neurofeedback, along with biofeedback, can significantly improve test anxiety, depression and mood of the students. In their study, Gevensleben et al. (2009) investigated that whether neurofeedback is an effective treatment for attention deficit-hyperactivity disorder. The results indicated a significant impact in reducing the symptoms of ADHD, but the subjects' attitudes toward treatment showed no differences in two control and experimental groups. Zhoe et al. (2009) studied the effectiveness of neurofeedback and biofeedback on academic performance of a group of student. The study findings showed that neurofeedback, along with biofeedback, can significantly improve test anxiety, depression and mood of the students. Moore (2004) reviewed the background related to the treatment of anxiety disorders through neurofeedback training (GAD: 8 studies; Phobia disorder: 3 studies; OCD: 2 studies; Post-traumatic stress: 1 study). Training sessions were short in most of these studies. However, alpha training increased alpha wave production from 64% to 78%, and the anxiety scores significantly decreased for a group used the combined therapy compared to the non-treated group. Due to the increasing anxiety in students at competitive examination level and poor performance of anxious students in the exam session, this research was trying to answer this question whether neurofeedback-based therapy can affect the exam anxiety reduction and shyness of female students of Ahwaz?

2. Research Hypotheses

Hypothesis 1: The neurofeedback-based therapy has an impact on reducing test anxiety (social humiliation, cognitive error, stress) of students.

Hypothesis 2: The neurofeedback-based therapy has an impact on reducing shyness of students.

3. Method

3.1 Study Population, Samples and Sampling Method

The study population consisted of all female students at competitive examination level in the city of Ahwaz who had referred to Aramesh Center counseling clinic in Ahvaz during the time of study (2016). The samples were matched based on a clinical interview and gaining a standard deviation higher than the average on test anxiety questionnaire and shyness questionnaire, socioeconomic status and other variables of interest. The study sample included 40 individuals who were selected by available sampling method and randomly divided into two experimental (n=20) and control (n=20) groups.

3.2 Research Design

This study was based on pre-test and post-test design with control group with a quasi-experimental approach. The experimental and control groups were matched randomly. Then, they completed Friedman's Test Anxiety and Stanford Shyness questionnaires. The experimental group received fifteen 30-minute sessions of neurofeedback treatment program (three sessions per week). Then, the two groups again completed Friedman's test anxiety and Stanford shyness questionnaires. The differences between pre-test and posttest of each group were evaluated in terms of significance.

Table 1. Research outline

Group	Pre-test	Independent variable	Post-test
Experimental	T1	X	T2
Control	T1	-	T2

The goal was to reduce anxiety and familiarity with treatment goals and treatment process. The treatment was planned based on anxiety and shyness protocols.

Instructions of session 1: Recording the profile, Getting familiar, Counseling, Measuring head and Doing the EEG. To do this, the student sits in a comfortable armchair in front of a monitor. The therapist measures particular points and connects the electrodes at designated points. The treatment protocol is written based on the EEG.

Instructions of sessions 2 and 3: Training deep-breathing exercises (to reduce anxiety) based on the written protocols (each session, three 10-minute protocols to be worked) Fz in front of the head to reduce anxiety, soft sleep adjustment, Pz behind the head to increase theta and alpha to reduce anxiety and increase relaxation, F4 on the right side of the head to reduce anxiety and increase incentive.

Instructions of session 4: Training deep-breathing exercises, Doing relaxation protocol (pz) along with songs without words, Visualization and Repeating the protocols of previous sessions.

Instructions of session 5: Doing deep breathing, a 5-minute counseling with the aim of realizing positive self-assessments and increasing self-confidence, Implementation of previous protocols.

Instructions of sessions 6 and 7: Doing deep breathing, Doing 10-minute protocols, At the end, 15 minutes assignments every night: Before bed, to lit up a candle and focus on its burning to reduce anxiety and increase concentration, Attending friends and speaking, in the first stage, with those easier to communicate.

Instructions of sessions 8 and 9: Doing deep breathing, Performing relaxation and anxiety protocols and a new F3 protocol in which three indices of disturbing thoughts, sleep and learning are controlled, encouraging to go in social situations, writing prominent and positive features of self and positive assessments of them, Talking about interpersonal relationships.

Instructions of session 10: Doing deep breathing, Training self-relaxation and Doing it daily, Doing treatment protocols.

Instructions of sessions 11 and 12: Doing deep breathing, Doing relaxation protocol with instrumental songs with the sound of sea, Positive visualization to reduce anxiety, Positive suggestion of individual capabilities.

Instructions of sessions 13 and 14: Doing deep breathing, Performing therapeutic protocols, Encouraging walking out with friends, Training skills to establish desirable social relationships with others.

Instructions of session 15: Doing deep breathing, Performing therapeutic protocols, Talking about the progress of their ability to enhance communication and control anxiety.

3.3 Measurement Tool

Data collection data in this study included gathering information from subjects in the field, literature and literature background by library method. Data collection tool included Friedman test anxiety questionnaire and Stanford Shyness Inventory.

Friedman's test anxiety questionnaire:

The questionnaire has 23 questions with the purpose of assessing different aspects of test anxiety (social humiliation, cognitive error, stress). Its response spectrum was a Likert-type, but the scoring method is reversed regarding the questions 1, 2, 3, 4, 5, 6, 7, 8, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22. In this study, the Cronbach alpha test values are given in the following table for the Friedman's test anxiety:

Table 2. Cronbach's alpha values in test anxiety inventory

Dimension	Cronbach's alpha
Social humiliation	0.90
Cognitive error	0.85
Stress	0.83
Total	0.91

3.4 Stanford Shyness Questionnaire

The questionnaire has 40 questions, and aims to assess the shyness of individuals. Its response range was a Likert type. To get the questionnaire overall score, the scores of all your questions should be summed together. This score would have a range from 40 to 160. In Nadi Najaf Abadi et al.'s (2014) studies, the structure validity of the questionnaire was obtained as 0.74 and approved. In the present study, the Cronbach's alpha for Stanford Shyness Inventory was obtained as 0.87.

3.5 Neurofeedback Device

In the present study, the neurofeedback therapy approach was performed by using devices equipped with computerized systems and the researcher supervising. This device includes Procomp 5 hardware from Thought Technol Ltd Company and Infiniti BioGeraph software. Initially, the neurofeedback receiving group, according to the treatment protocol, were given fifteen 30-minute sessions of neurofeedback treatment with increased alpha wave, while the control group received no treatment neurofeedback. To capture alpha wave activity, while the subjects are sitting on a chair placed in front of the monitor screen, according to the international 20-10 system, an active electrode of EEG recording at O1 and O2 regions and two reference and ground electrodes were respectively placed on the right and left ears. Each subject receives 15 sessions of neurofeedback during 5 weeks. All sessions include 5 minutes to reach the initial calmness, 2 minutes of recording baseline data and 30 minutes of healing process. Providing audio bonuses is provided to supply the criteria set in the first sessions that had been explained to the subjects.

4. Results

The descriptive findings of this study included statistics indices such as mean, standard deviation and number of sample subjects for all variables in this study are presented in Table 1.

Table 3. Mean and SD of test anxiety and shyness scores of experimental and control groups in the pre-test and post-test and follow-up stages

Variable	Stage	Statistical index		Mean	SD	Number
		Group				
Test Anxiety	Pre-test	Experimental		58.80	4.57	20
		Control		58.60	3.99	20
	Posttest	Experimental		30.95	5.96	20
		Control		59.40	4.09	20
	Follow-up	Experimental		31.92	5.18	20
		Control		58.42	3.68	20
Shyness	Pre-test	Experimental		97.15	21.23	20
		Control		98.45	17.94	20
	Posttest	Experimental		63.40	12.56	20
		Control		98.05	17.51	20
	Follow-up	Experimental		63.48	12.62	20
		Control		97.15	17.42	20

As can be seen in Table 3, in the pre-test phase, the values of mean and standard deviation of test anxiety of each of the experimental and control groups are respectively as 58.80 and 4.57 and 58.60 and 3.99, while the values of mean and standard deviation in the posttest phase are equal to 31.95 and 5.96 and 59.40 and 40.09, respectively. In shyness variable, in the pre-test stage, the values of mean and standard deviation for experimental and control groups are respectively as 97.15 and 21.23 and 98.45 and 17.94, while in the post-test stage, the values of mean and standard deviation are equal to 63.40 and 12.56 and 98.05 and 17.51, respectively.

Table 4. Results of Levin test regarding the pre-assumption of equality of scores variances of the research variables between the two groups of the population

Test anxiety variable	F	First degrees of freedom	Second degrees of freedom	Significance level
Pretest	0.663	1	38	0.421
Posttest	0.322	1	38	0.574

As can be seen in Table 4, the null hypothesis of equality of scores variances of the two groups for test anxiety variable is confirmed. This means the pre-assumption of equality of scores variances in both experimental and control groups was confirmed. However, when the samples sizes are equal, the significance of Levine test will not have a significant impact on nominal alpha level.

Table 5. Results of Levin test regarding the pre-assumption of equality of scores variances of the research variables between the two groups of the population

Shyness variable	F	First degrees of freedom	Second degrees of freedom	Significance level
Pretest	0.612	1	38	0.439
Posttest	1.113	1	38	0.298

As can be seen in Table 5, the null hypothesis of equality of scores variances of the two groups for shyness variable is confirmed. This means the pre-assumption of equality of scores variances in both experimental and control groups was confirmed. However, when the samples sizes are equal, the significance of Levine test will not have a significant impact on nominal alpha level.

Table 6. Results of the Kolmogorov-Smirnov test regarding assumption of normal distribution of test anxiety scores

Variable	Number	Mean	F	Significance level
Test anxiety	40	58.70	0.604	0.859

As seen in Table 6, as achieved significant level on test anxiety variable is higher than the significance level (0.05), therefore, the assumption of normal distribution of mental health scores is confirmed.

Table 7. Results of the Kolmogorov-Smirnov test regarding assumption of normal distribution of shyness scores

Variable	Number	Mean	F	Significance level
Shyness	40	97.80	0.765	0.603

As seen in Table 7, as achieved significant level on shyness variable is higher than the significance level (0.05), therefore, the assumption of normal distribution of shyness scores is confirmed.

Hypothesis 1: The neurofeedback-based therapy has an impact on reducing test anxiety (social humiliation, cognitive error, stress) of female students at competitive examination level.

Table 8. The results of one-way analysis of covariance on the post-test scores mean of test anxiety of female students at competitive examination level in experimental and control groups with pre-test

Variable	Source of changes	Sum of squares	Degrees of freedom	Mean of squares	F	Significance level of P	Eta squares	Statistical power
Anxiety	Pre-test	266.090	1	266.090	10.06	0.0001	0.214	1
	Group	7548.91	1	7548.91	285.61	0.0001	0.855	1
	Error	977.83	37	26.42				

As shown in Table 8, in pre-test control, there are significant differences between female students of experimental and control groups on test anxiety variable ($p < 0.0001$ and $F = 285.61$); thus, the first hypothesis is confirmed. In other words, according to the mean values of female students, the neurofeedback-based therapy reduced the test anxiety of the experimental group compared to the control group. The rate of effect or difference is equal to 0.85. In other words, 85% of individual differences in the scores of test anxiety posttest are related to the effect of neurofeedback-based therapy. The statistical power is equal to 1.00. In other words, there has not been the possibility of type-II error.

Hypothesis 1-1: The neurofeedback-based therapy has an impact on reducing social humiliation component of test anxiety of female students at competitive examination level.

Table 9. The results of one-way analysis of covariance on the post-test scores mean of social humiliation component of test anxiety of female students at competitive examination level in experimental and control groups with pre-test

Variable	Source of changes	Sum of squares	Degrees of freedom	Mean of squares	F	Significance level of P	Eta squares	Statistical power
Anxiety	Pre-test	32.285	1	32.285	9.46	0.0004	0.204	1
	Group	974.89	1	974.89	281.51	0.0001	0.884	1
	Error	128.89	37	3.463				

As shown in Table 9, in pre-test control, there are significant differences between female students of experimental and control groups on social humiliation component of test anxiety variable ($p < 0.0001$ and

$F=281.51$); thus, the first hypothesis is confirmed. In other words, according to the mean values of female students, the neurofeedback-based therapy reduced the social humiliation component of test anxiety of the experimental group compared to the control group. The rate of effect or difference is equal to 0.88. In other words, 88% of individual differences in the scores of social humiliation component of test anxiety posttest are related to the effect of neurofeedback-based therapy. The statistical power is equal to 1.00. In other words, there has not been the possibility of type-II error.

Hypothesis 1-2: The neurofeedback-based therapy has an impact on reducing cognitive error of test anxiety of female students at competitive examination level.

Table 10. The results of one-way analysis of covariance on the post-test scores mean of cognitive error of test anxiety of female students at competitive examination level in experimental and control groups with pre-test

Variable	Source of changes	Sum of squares	Degrees of freedom	Mean of squares	F	Significance level of P	Eta squares	Statistical power
	Pre-test	79.511	1	79.511	15.302	0.0001	0.293	0.968
Anxiety	Group	835.930	1	835.930	160.87	0.0001	0.813	1
	Error	192.261	37	5.196				

As shown in Table 10, in pre-test control, there are significant differences between female students of experimental and control groups on cognitive error component of test anxiety variable ($p<0.0001$ and $F=160.871$); thus, the first hypothesis is confirmed. In other words, according to the mean values of female students, the neurofeedback-based therapy reduced the cognitive error component of test anxiety of the experimental group compared to the control group. The rate of effect or difference is equal to 0.81. In other words, 81% of individual differences in the scores of cognitive error component of test anxiety posttest are related to the effect of neurofeedback-based therapy. The statistical power is equal to 1.00. In other words, there has not been the possibility of type-II error.

Hypothesis 1-3: The neurofeedback-based therapy has an impact on reducing stress component of test anxiety of female students at competitive examination level.

Table 11. The results of one-way analysis of covariance on the post-test scores mean of stress component of test anxiety of female students at competitive examination level in experimental and control groups with pre-test

Variable	Source of changes	Sum of squares	Degrees of freedom	Mean of squares	F	Significance level of P	Eta squares	Statistical power
	Pre-test	128.684	1	128.684	16.69	0.0001	0.310	1
Anxiety	Group	1002.463	1	1002.463	129.38	0.0001	0.878	1
	Error	286.675	37	7.784				

As shown in Table 11, in pre-test control, there are significant differences between female students of experimental and control groups on stress component of test anxiety variable ($p<0.0001$ and $F=129.38$); thus, the first hypothesis is confirmed. In other words, according to the mean values of female students, the neurofeedback-based therapy reduced the stress component of test anxiety of the experimental group compared to the control group. The rate of effect or difference is equal to 0.87. In other words, 87% of individual differences in the scores of stress component of test anxiety posttest are related to the effect of neurofeedback-based therapy. The statistical power is equal to 1.00. In other words, there has not been the possibility of type-II error.

Hypothesis 2: The neurofeedback-based therapy has an impact on reducing shyness of female students at competitive examination level.

Table 12. The results of one-way analysis of covariance on the post-test scores mean of shyness of female students at competitive examination level in experimental and control groups with pre-test

Variable	Source of changes	Sum of squares	Degrees of freedom	Mean of squares	F	Significance level of P	Eta squares	Statistical power
Shyness	Pre-test	944.764	1	944.764	8.34	0.0001	0.186	1
	Group	1148.55	1	1148.55	49.20	0.0001	0.533	1
	Error	4145.074	37	112.029				

As shown in Table 12, in pre-test control, there are significant differences between female students of experimental and control groups on shyness variable ($p < 0.0001$ and $F = 49.20$); thus, the second hypothesis is confirmed. In other words, according to the mean values of female students, the neurofeedback-based therapy reduced the shyness of the experimental group compared to the control group. The rate of effect or difference is equal to 0.53. In other words, 53% of individual differences in the scores of shyness posttest are related to the effect of neurofeedback-based therapy. The statistical power is equal to 1.00. In other words, there has not been the possibility of type-II error.

5. Discussion & Conclusion

Hypothesis 1: The neurofeedback-based therapy has an impact on reducing test anxiety of female students at competitive examination level in Ahvaz.

Hypothesis 1-1: The neurofeedback-based therapy has an impact on reducing social humiliation component of test anxiety of female students at competitive examination level in Ahvaz.

Hypothesis 1-2: The neurofeedback-based therapy has an impact on reducing cognitive error of test anxiety of female students at competitive examination level in Ahvaz.

Hypothesis 1-3: The neurofeedback-based therapy has an impact on reducing stress component of test anxiety of female students at competitive examination level in Ahvaz.

These findings are consistent and coordinating with the results of research by Jahanian Najafabadi et al. (2014), Wang et al. (2013), Zhou et al. (2009), Garrett and Silver (1976) and Hammond (2005). These findings are consistent and coordinating with the results of Jahanian Najafabadi et al. (2014) that investigated the effect of neurofeedback training on reducing anxiety in those referred to the counseling and psychological services clinic in the city of Isfahan. The results of analysis of covariance showed that neurofeedback training is effective in reducing anxiety, and indicated that neurofeedback can significantly reduce the anxiety of participants in the research. These findings are also consistent and coordinating with the results of Wang et al. (2013) study as "Biofeedback improves the high rate of biasing trait in anxious individuals". Biofeedback significantly reduced attentional bias trait in the anxiety of subjects. They are also consistent and coordinating with the results of study by Zhou et al. (2009) who studied the effectiveness of neurofeedback and biofeedback on academic performance of a group of student. The study findings showed that neurofeedback, along with biofeedback, can significantly improve test anxiety, depression and mood of the students. They are consistent and coordinating with the results of study by Gareth and Silver (1976) as well. Their study included a randomized selection, four different treatment groups and a control group of waiting list. In one study, a significant decrease was observed in test anxiety, while no significant decrease was seen in the untreated control group and relaxation training group. Other individuals also received courses of neurofeedback training and muscle biofeedback training. In these subjects, the anxiety scores significantly decreased compared with the untreated group.

They are also consistent and coordinating with the results of Hammond (2005), who performed a study entitled as "Neurofeedback with anxiety and emotional disorders". The findings of this show that neurofeedback in addition to biofeedback can significantly improve test anxiety, depression and mood. They are also consistent and coordinating with the results of Godoy (2005) who showed in his study that the efficacy of existential psychotherapy on the levels of social anxiety (associated with shyness), depression and quality of life in pulmonary patients is more than the cognitive-behavioral approach. Explaining this finding, one can say that principally the mental image and cognitive assessment of each individual are related to his situation and failure. It is often seen that the students suffering from test anxiety have negative and unrealistic thoughts of their own, do not consider themselves competent and deserving individuals and have a strong fear of failure. In fact, this is not anxiety that directly leads to reduced performance and low score of an individual in a test, but the thoughts of

unsuccessful people associated with anxiety are the main cause of this problem. Also, an important part of cognitive symptoms of test anxiety involves negative thoughts and self-talks. Other symptoms include inability to organize thoughts, difficulty in concentrating, difficulty in remembering words and key concepts, disturbing thoughts about performing better than others and comparing themselves with others.

Hypothesis 2: The neurofeedback-based therapy has an impact on reducing shyness of female students at competitive examination level in Ahvaz.

The results in Table 4-7 showed that neurofeedback-based treatment has an impact reducing shyness of female students at competitive examination level in Ahvaz, and the hypothesis was confirmed. Specifically, no study was found to compare it with the results of this finding. However, one can say that these findings are consistent and coordinating with the results of research by Jahanian Najafabadi et al. (2014), Wang et al. (2013), Zhou et al. (2009), Garrett and Silver (1976) and Hammond (2005). These findings are consistent and coordinating with the results of Jahanian Najafabadi et al. (2014) that investigated the effect of neurofeedback training on reducing anxiety in those referred to the counseling and psychological services clinic in the city of Isfahan. The results of analysis of covariance showed that neurofeedback training is effective in reducing anxiety, and indicated that neurofeedback can significantly reduce the anxiety of participants in the research. These findings are also consistent and coordinating with the results of Wang et al. (2013) study as "Biofeedback improves the high rate of biasing trait in anxious individuals". Biofeedback significantly reduced attentional bias trait in the anxiety of subjects. They are also consistent and coordinating with the results of study by Zhoe et al. (2009) who studied the effectiveness of neurofeedback and biofeedback on academic performance of a group of student. The study findings showed that neurofeedback, along with biofeedback, can significantly improve test anxiety, depression and mood of the students. They are consistent and coordinating with the results of study by Gareth and Silver (1976) as well. Their study included a randomized selection, four different treatment groups and a control group of waiting list. In one study, a significant decrease was observed in test anxiety, while no significant decrease was seen in the untreated control group and relaxation training group. Other individuals also received courses of neurofeedback training and muscle biofeedback training. In these subjects, the anxiety scores significantly decreased compared with the untreated group.

They are also consistent and coordinating with the results of Hammond (2005), who performed a study entitled as "Neurofeedback with anxiety and emotional disorders". The findings of this show that neurofeedback in addition to biofeedback can significantly improve test anxiety, depression and mood. They are also consistent and coordinating with the results of Godoy (2005) who showed in his study that the efficacy of existential psychotherapy on the levels of social anxiety (associated with shyness), depression and quality of life in pulmonary patients is more than the cognitive-behavioral approach. In expounding this theory, one can say that the shyness treatment is based on making changes in the cognitive area (cognitive therapy) and in the practice of life and social life of a person. The major treatment method of shyness involves changes in the way of thinking, finding new attitude toward oneself and surroundings, enjoying the ability to do new reactions against the people and interpersonal interactions, making changes in beliefs and values system reinforcing shyness and finally achieve the main focus of anxiety in a shy individual, strengthening the motivation and increasing social skills, academic, career and professional performances. The most important methods of shyness treatment includes making the shy individual to pay attention to the power of thinking, changing his attitude and feedback to various phenomena, and creating inner readiness to make positive changes in his cognitive domain. Shyness is a behavior and an inappropriate behavior. Any behavior can be changed, but it should be noted that every solution by anyone and in any case may not occur to be effective.

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The Relationship between Social Desirability, Responsibility, Self-Efficacy and Communication Skills of Students

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Abstract

The aim of this study is to determine the relationship between social desirability, self-efficacy, and responsibility and communication skills of high school students in Ahvaz city. The sample of this study has been consisted of 360 participants that have been selected by cluster sampling method. This research is a descriptive and correlational study. The tools that have been used in this research are: Social Desirability questionnaire of Crowne and Marlowe (1960), the responsibility questionnaire of Harrison (1999), general self-efficacy questionnaire of Scherer et al. (1982) and communication skills questionnaire of Harjy and Marshall (1986). The data has been analyzed by using the statistical methods of Pearson correlation and multiple regressions. The results have shown that there is a positive relationship between social desirability, self-efficacy, responsibility and communication skills of students. The results of multiple regression analysis have shown that social desirability and responsibility and self-efficacy are respectively the best predictors of communication skills.

Keywords: social desirability, responsibility, self-efficacy, communication skills

1. Introduction

Interpersonal relationships are one of the most important components of human life from birth to death. None of the human potential capabilities will grow without the presence of interpersonal relationships. Acquisition of proper interpersonal relationships is so important in the development of mental health, personality, formation of identity, and improvement of life quality, enhancement of compatibility and self-efficacy. People who have poor communication skills are always less accepted by others and they are also faced with many short-term and long-term problems. In most cases the consequences of these cases are: loneliness, family and academic problems, lack of competence and job dissatisfaction, stress, physical illness and even death. To get rid of such problems, people should be familiar with a set of skills; it means that each individual should have the required knowledge and skills to make a healthy and productive communication with others (Fayaz et al., 2010). Communication is a basic necessity in human life. Human beings are naturally social creatures that meet each other's needs through mutual cooperation. Human relationships not only enable people to meet their physical and security needs, but also help them to meet their psychological needs, such as the need for love, attachment and self-worth. The ability to communicate is essential to create well-being and human performance (Hemati, 2008). In the community, students should have the ability to solve problems, talk about their problems, make communication with different people, have individual and group perception, and have the ability to control their feelings, motivations and behaviors. The inability of the people of a society to have correct perception of problems, lack of cooperation, lack of understanding each other and such things will face them with problems in making communication with people in a society which is moving towards globalization. This issue will create a generation who are weak and powerless against the variety of social issues, and these issues result from the lack of social skills specially communication skills (Khosravi, 2008). Social desirability implies to the learned and accepted social behaviors that help people to communicate with each other in a way that it would lead to positive responses and avoid negative responses (Akbarinezhad, 2008).

Morgan (1980) believes that social desirability creates the possibility to start and sustain a positive and mutual interaction with others. The social processes refer to the person's ability to create a sophisticated behavior in response to the feedback of social desirability and based on the rules and related objectives. Human being is a social creature and living individually is almost impossible for him. Ideal social upbringing, having good

relationships with others and the ability to have compatibility with the environment are the most important factors of happiness (Akbarinezhad, 2008). It can be said that, social development is the most important aspect of any person's growth. The measure of everyone's social development is the level of their compatibility with others. This other people includes everyone such as friends, colleagues, families and relatives, neighbors and even the people whom we meet for the first time.

Social development is not only effective on our compatibility with people who have relationships with us now, but also is effective on our career success and social progress after retirement. In today's world due to the complexities of life, human being is faced with various challenges including population crisis, the crisis of health, nutrition and changes in technology and professional terms, the impacts of new technologies on social skills and ethics and family problems. Each one of these crises will impose some problems on people's lives and their personal and social behaviors. Regardless of the current problems, the frequent changes and the changes in living patterns, changes in social expectations and changes in values, beliefs and culture can directly or indirectly affect the person's ability to compromise (Hariri, 2007). Today's developing society requires responsible and self-sufficient people, and teaching the skill of social responsibility to children and adolescents requires a particular atmosphere at both home and school. Some opportunities should be provided for the children and adolescents to find evaluation tools in order to help them make better decisions. They need the decisions that in this complex world could lead them to have a satisfying and productive life. Today's human beings need to take responsibility for their lives and destiny more than ever, and this won't happen without increasing the perception of children and adolescents about their own role in determining their destiny and building their life quality. In order to achieve these goals, diligence and careful planning is necessary (Soheili, 2008). Responsibility is the person's obligation and commitment toward himself and (his beliefs, values, job duties and family) (Soheili, 2008). One of the variables that is associated with communication skills is self-efficacy. Self-efficacy is the person's judgments about his abilities, capacities and capabilities to carry out special tasks. The judgments of self-efficacy have a high importance and sensitivity because they have an important role in the development of intrinsic motivation. Self-efficacy is the person's belief in his ability to perform the behaviors that could lead to a favorable result in a special situation (Gheibi, 2010). Intrinsic motivation grows when the person tries to achieve exciting measures, in this state, a potential self-efficacy perception is created in the person to achieve these measures, and also when the person achieves the favorable result, he finds a positive self-assessment. This internal interest will lead to the individual's long-term efforts without the presence of environmental rewards. High self-efficacy can play a decisive role in intrinsic motivation and communication skills of students. Self-efficacy is effective on people's confidence about their own abilities to control their thoughts, feelings and activities, and also their actual performance, excitement and choosing behaviors and, ultimately, the level of effort that they make to do an activity. These beliefs affect the quality of emotional health and vulnerability against depression and stress and making decisions in a critical situation (Gheibi, 2010). Sideridis et al. (2013) in a research have studied motivation, meta-cognition and psychopathology as the predictors of learning disabilities; the results have shown that the level of motivation (such as self-efficacy, motivating force, avoiding the duty, dedication to purpose or self-perception) is very accurate in classifying the students with learning disabilities. The results also have shown that meta-cognition and psychopathology are powerful predictors in learning disabilities. Glasser (2012) believes that human problems and abnormalities result from the fact that they have not accepted their responsibilities, because they cannot satisfy their basic needs on the basis of proper and humanitarian conditions; in fact, their parents did not have such skills and no body have taught them to have responsibility. Glasser cares more about the behavioral aspect of responsibility and has less emphasis on its cognitive and emotional aspects.

Peterson et al. (2011) have studied the relationship between social desirability and personality traits in students. They have shown that social desirability strongly balances the relationship between personality factors (especially extraversion and neuroticism) and students' preparation; but it had a little effect on the relationship between personality and academic performance. Tan and Hall (2012) have conducted a research on the relationship between social desirability and students' performance. They have found that social desirability has a significant positive effect on the avoidance of performance, whereas it has a little effect on the tendency to have performance. Mehmet Ulukan et al. (2012) have conducted a research on the level of participation in exercise based on its various variables among the elementary school students, and also the relationship between the level of participation and communication skills. In this study, they have concluded that the level of student's participation in sport activities and their communication skills significantly depends on their gender, age, parents' education, level of income and social status. According to the mentioned issues, the aim of this study is to find that what is the relationship between social desirability, social responsibility and self-efficacy and student's communication skills?

2. Method

The method of this research is correlational. The statistical population has included all the male and female high school students in Ahvaz city that are studying in 2015-2016. The total number of students is around 5100. The sample of this study has been consisted of 360 participants (170 boys and 190 girls) from the high school students, and they have been selected by cluster sampling and based on Morgan table.

2.1 Research Tools

2.1.1 The Social Desirability Questionnaire

This scale has been developed by Crowne and Marlowe in 1960, and it has 9 questions that are presented as completely correct, correct, no idea, disagree and totally disagree. People who obtain between the score of 20 or higher greatly consider the social approvals. The actual behavior of these people is very concerted and shows a high compatibility with the rules and social norms. Bagheri (2006) in a research, in order to validate this scale has correlated it with the scores of the self-confirmation questionnaire of rattus, and it has been found that there is a significant positive relationship between these scales. Also, by using Cronbach's alpha and split-half methods, the reliability coefficients of this scale have been respectively obtained 0.74 and 0.71 that generally have shown the acceptability of its reliability coefficients. In the present study, the Cronbach's alpha method has been used to determine the reliability of social desirability questionnaire that has been achieved 0.84 which shows that the reliability coefficients of the questionnaire are acceptable.

2.1.2 Responsibility Assessment Questionnaire

In order to assess the responsibility, the subscale of responsibility assessment which is taken from the California psychological questionnaire has been used. Among the 462 questions of the main questionnaire, 42 questions of responsibility have been extracted and used. The mentioned questionnaire for the first time has been presented by Harrison Gough in 1987 and it had 18 scales, in 1999 he has reviewed it again and its questions have been changed to 162 and its subscales have been changed to 20. The responsibility measurement scale with 42 questions has been used in order to measure some characteristics such as conscientiousness, commitment, diligence, seriousness, reliability, discipline-based behaviors, logic and sense of responsibility (Marnat, 2003; translated by Nikkho, 2006). The reliability coefficients of the responsibility scale in the research of Mousavi (Mousavi, 1998) has been obtained 0.070, in the study of Rezaei (Rezaei, 1998) 0.65 and in the research of Mahmudi (Mahmudi, 2004) have been obtained 0.64. In the present study, the Cronbach's alpha method has been used to determine the reliability of the responsibility questionnaire and it has been achieved 0.88 which shows that the reliability coefficients of the questionnaire are acceptable.

2.1.3 General Self-Efficacy Questionnaire

This questionnaire has been developed by Scherer and colleagues in 1982 and it has 17 articles. The self-Efficacy Questionnaire measures the individual's idea about his ability to deal with different situations. This questionnaire has been set based on the five Likert scale. In this scale, the score of completely disagree is one, and the score of completely agree is 5. High scores indicate the high self-efficacy. Scherer and colleagues (1982) have achieved the Cronbach's alpha of 0.86 for this questionnaire. In the present study, the Cronbach's alpha method has been used to determine the reliability of responsibility questionnaire that has been achieved 0.83 which shows that the reliability coefficients of the questionnaire are acceptable.

2.1.4 Communication Skills Test

This test has been developed by Harji and Marshall (1986) to measure students' communication skills. The first step in preparing this test is to study the interpersonal communication skills. According to this model, three general factors have been determined including management of emotions, perception and assertiveness. This test has 34 questions. In this test, the participants according to their level of agreement with the question select one of the options from the first option (almost never) that has the lowest level of agreement to the last option that is (most of the time) which has the highest level of agreement. The range of scores varies from one to five; so the reversed questions (1, 10, 8, 6, 4, 2, 34, 32, 28, 25, 23, 21, 19, 17, 14, 13, and 12) will be scored reversely. The total score for each sub-test questions is the score of that sub-test. The validity of the questionnaire in the research of Hossein Chari and Fadakar (2005) on a sample of 733 Iranian students by using Cronbach's alpha and split-half methods for the total score of the test has been respectively reported 0.71 and 0.76. In the present study, the Cronbach's alpha method has been used to determine the reliability of responsibility questionnaire that has been achieved 0.81 which shows that the reliability coefficients of the questionnaire are acceptable.

3. Results

The descriptive findings of this study have included the statistical parameters such as mean, standard deviation for all the studied variables that are presented in Table 1.

Table 1. Mean and standard deviation of the score of variables between social desirability, responsibility, self-efficacy and communication skills among male and female students

Variable	Statistical indicators		Mean	Standard deviation	Number
	Participants				
Social desirability	Male students		37.08	6.13	170
	Female students		39.35	7.43	190
	Total students		38.22	7.18	360
Responsibility	Female students		101.62	20.07	170
	Male students		97.36	18.01	190
	Total students		99.49	19.04	360
Self-efficacy	Female students		62.58	9.84	170
	Male students		67.62	11.39	190
	Total students		65.10	10.62	360
Communication skill	Female students		81.70	13.88	170
	Male students		78.19	12.76	190
	Total students		79.95	13.32	360

3.1 The Findings of the Research Hypotheses

This study includes the following hypotheses, each hypothesis with its obtained results from their analysis have been presented below:

3.1.1 First Hypothesis

There is a relationship between social desirability and communication skills of students.

Table 2. Simple correlation coefficients between social desirability and communication skills of students

The criterion variable	Statistical indicators		The correlation coefficient (r)	Level of significance (p)	Number of samples (n)
	The predictor variable				
Communication skills	Social desirability		0.44	0.0001	360

As can be seen in Table 2, there is a significant positive relationship between social desirability and communication skills of students ($p=0.0001$, $r=0.44$). Thus, the first hypothesis is confirmed. In other words, the students who have higher social desirability will also have better communication skills and vice versa.

3.1.2 The Second Hypothesis

There is a relationship between responsibility and communication skills of students.

Table 3. Simple correlation coefficients between responsibility and communication skills of students

The criterion variable	Statistical indicators		The correlation coefficient (r)	Level of significance (p)	Number of samples (n)
	The predictor variable				
Communication skills	responsibility		0.39	0.0001	360

As can be seen in Table 3, there is a significant positive relationship between responsibility and communication skills of students ($p=0.0001$, $r=0.39$). Thus, the second hypothesis is confirmed. In other words, the students who have higher level of responsibility will also have better communication skills and vice versa.

3.1.3 The Third Hypothesis

There is a relationship between self-efficacy and communication skills of students.

Table 4. Simple correlation coefficients between self-efficacy and communication skills of students

The criterion variable	Statistical indicators		The correlation coefficient (r)	Level of significance (p)	Number of samples (n)
	The predictor variable				
Communication skills	self-efficacy		0.32	0.002	360

As can be seen in Table 4, there is a significant positive relationship between self-efficacy and communication skills of students ($p=0.002$, $r=0.32$). Thus, the third hypothesis is confirmed. In other words, the students who have higher self-efficacy will also have better communication skills and vice versa.

3.1.4 Fourth Hypothesis

There is a multiple relationship between social desirability, self- efficacy and responsibility and communication skills of students.

Table 5. Multiple correlation coefficients of the predictor variables (social desirability, responsibility and self-efficacy) with the communication skills of students with the simultaneous entry method and stage method

Method	Predictor variables	R	R ²	F	p=	β	t	p=
entry method	Social desirability					0.30	6.019	0.0001
	responsibility	0.49	0.24	14.51	0.0001	0.25	4.89	0.0001
	self-efficacy					0.19	3.01	0.0002
Stage method	1-Social desirability	0.44	0.20	34.34	0.001	0.44	7.70	0.0001
	2-responsibility					0.31	5.66	0.0001
						0.22	3.69	0.0001
	3-self-efficacy					0.29	3.51	0.0001
			0.59	0.35	44.36	0.0001	0.26	4.55
					0.24	4.27	0.002	

As can be seen in Table 5, the regression of the prediction of communication skills of students from the variables of social desirability, responsibility and self-efficacy is significant ($p<0.0001$, $F=14.51$). Thus, the forth hypothesis is confirmed.

Social desirability factor with the beta coefficient of 0.30, responsibility factor with the beta coefficient of 0.25, and self-efficacy factor with the beta coefficient of 0.19 can positively and significantly predict the communication skills of students.

Also, the value of R^2 indicates that 24% of the variance of the communication skills of students can be explained by the above-mentioned variables.

4. Discussion and Conclusion

This study is conducted in order to investigate the relationship between social desirability, self-efficacy, and responsibility and communication skills of high school students of Ahvaz city in 2015. The research hypotheses are explained as follows:

As it has been seen, there is a significant positive relationship between social desirability and communication skills of students. The students who have higher social desirability will also have better communication skills and vice versa. The results of this study are consistent with the findings of Zafari et al. (2013), Mahmoudi Rad (2013), Lim, La and Nai (2012), Bykerz (2012), Mehmet Alvakan and colleagues (2012), Darnon, Dominer, Delmas Pool Ferry and Butra (2011), and Peterson et al. (2011). According to these results, we can say that socialization is a process in which the norms, skills, incentives, attitudes and behaviors of people are formed in order to make their current or future role in the society to seem appropriate. This process begins from the moment of birth, and some people, groups and organizations have a key role in it. Socialization is a system of mutual relationship between the individual and the society; therefore, both the cultural impacts and individual's growth patterns must be considered in this system simultaneously (Akbarinezhad, 2008).

As it has been seen, there is a significant positive relationship between responsibility and communication skills of students. The students who have higher level of responsibility will also have better communication skills and vice versa. The results of this study are consistent with the findings of Yunesi et al. (2010), Akbarinezhad (2008), Kordlu (2008), Soheili (2008), Hariri (2007), Ranjbarian et al. (2005), Glaser (2012), and Miyamoto (2012). According to these results we can say that delegating responsibilities to children and involving them in the society is a fundamental necessity to facilitate their development and to enter them to the adulthood period. Working is the need of every healthy person and also is the therapist for emotional feelings and imaginations of adolescences. A teenager who enters the community and gets familiar with the world of work can tolerate the pressures more easily, and his social, emotional and intellectual development would be accelerated. More important is that an opportunity will be given to the teenagers to examine their ideas in practice and get developed gradually; he also can find a plan for his occupational and social roles and determine his life plan Kordlu (2008).

As it has been seen, there is a significant positive relationship between self-efficacy and communication skills of students. The students who have higher self-efficacy will also have better communication skills and vice versa. The results of this study are consistent with findings of Michaeili et al. (2015), Ahmadi et al. (2013), Harji et al. (2007), Sideridis et al. (2013), Watson (2011). According to these results we can say that self-efficacy as a cognitive process in morbid psychology plays a fundamental role in lower perceived self-efficacy or perceived inefficiency. Having high self-efficacy increases personal health and also enhances the ability to perform tasks in various ways. People who believe in their capabilities consider the difficult tasks as the challenges that they should master them, and instead of considering them as a threat and avoiding them, they choose that challenging goals and stay committed to fulfill them. They believe that they are able to control the threatening situations. Such an opinion about the capabilities will reduce the stress and depression of the person and leads to the completion of tasks (Rezaienasab, 2010). Self-efficacy is the person's perception and judgment of his abilities and skills to perform the tasks that are essential for special situations. On the other hand, the sense of self-efficacy enables people to use their skills in dealing with obstacles and to do extraordinary things; therefore, self-efficacy is an important factor to have successful performances and basic necessary skills. Self-efficacy affects the amount of effort to perform a task. People who believe in their efficiency will make additional efforts to deal with the obstacles and problems. Interpersonal relationships are one of the most important components of human life from birth to death. None of the human potential capabilities will grow without the presence of interpersonal relationships. Acquisition of proper interpersonal relationships is so important in the development of mental health, personality, formation of identity, and improvement of life quality, enhancement of compatibility and self-efficacy. People who have poor communication skills are always less accepted by others and they are also faced with many short-term and long-term problems. In most cases the consequences of these cases are: loneliness, family and academic problems, lack of competence and job dissatisfaction, stress, physical illness and even death. To get rid of such problems, people should be familiar with a set of skills; it means that

each individual should have the required knowledge and skills to make a healthy and productive communication with others.

As we can see, the regression analysis of the prediction of communication skills of students based on the variables of social desirability, responsibility and self-efficacy is significant. Social desirability factor with the beta coefficient of 0.30, responsibility factor with the beta coefficient of 0.25, and self-efficacy factor with the beta coefficient of 0.19 can positively and significantly predict the communication skills of students. Also, the value of R^2 indicates that 24% of the variance of the communication skills of students can be explained by the above-mentioned variables. In the community, students should have the ability to solve problems, talk about their problems, make communication with different people, have individual and group perception, and have the ability to control their feelings, motivations and behaviors. The inability of the people of a society to have correct perception of the problems, lack of cooperation, lack of understanding each other and such things will face them with problems in making communication with people in a society which is moving towards globalization. This issue will create a generation who are weak and powerless against the variety of social issues, and these issues result from lack of social skills specially communication skills (Khosravi, 2008).

Initially, the sense of attachment starts in the family and then expands to larger groups and communities but in the end, this sense of attachment must involve all the humans. In this regard, social responsibility could be considered as the essence of social cycle in which the people can recognize their identity. Certainly, by having social responsibility, the sense of connection to a group of people and having a benevolent relationship with those who share their common interest or goals with others could get so much easier; these groups include family, school, class, religious community and so on. When the person has an appropriate social behavior in these groups, he expects to be rewarded by their members. In this concept even a bunch of gang members also can have social responsibility in their groups. Inability to control some of the unrelated and confounding variables including intelligence quotient, level of interest, motivation, fatigue or other effective variables, and also, lack of homogeneity between participants based on their determining variables such as age, education of parents and other demographic variables have been considered as some of the limitations of this research. One of the other limitations of this study was that due to lack of time we could not conduct a retest on this sample and then compare its results with the results of this study. On the other hand, this study has been conducted on a sample of male and female high school students in Ahvaz city, and generalization of these findings to another sample in other areas or grades should be implemented with great caution. One of the limitations of this study that is specified to questionnaires is that sometimes some of the respondents are reluctant and uninterested to answer the questions. Also, sometimes people in order to provide a better image of themselves do not answer some of the questions correctly. Considering the fact that the present study has been conducted to investigate the relationship between social desirability, self-efficacy, responsibility and communication skills of high school students in Ahvaz city; it is suggested that in the future researches, the cause and effect relationship of these variables should be examined. It is suggested to conduct this research on other communities because enhancing such researches can prevent many problems and psychological and social damages. In such researches, it is better to use the questionnaires with fewer questions so the respondents could answer the questions with more patience. The findings of this research can be used for training and informing the students, and social desirability, responsibility and self-efficacy can be used as the most important factors that affect interpersonal and social relationships of the students. Since the students have considered the criteria of intellectual agreement as the most important factor in selecting the behavioral patterns, it is necessary to provide the opportunity for the students in the schools to have the chance of getting involved in the debates and present their ideas. As a result, the selection of behavioral patterns for students could be done more accurately and logically.

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Elderly Sports, Challenges and Solutions

Case Study: Western Provinces of Iran

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Abstract

The purpose of this research was to discuss the challenges and solutions regarding elderly sports in western provinces of Iran. The research is survey-descriptive and has conducted as field method. The data population were men and women aged over 60 years in the western provinces of Iran at 2015 that their number is 750,000 people according to statistics taken from official authorities. Among the population the 2,540 people were selected using Morgan table. Sampling method was accessible method. Researcher made questionnaire was used for data collection which contained 30 item in the 5 item Likert scale. The validity of questionnaire confirmed by 11 people of sport management professors. The reliability of the questionnaire was obtained 0.74 using Cronbach's alpha. Descriptive statistics indexes (Mean, standard deviation, and percent) and Chi-squared test were used for analyzing data. Results indicated that lack of sufficient recreational and sports facilities, low levels of education, low levels of income, physical weakness, cultural factors, psychological characteristics, family and proper education play a significant role in enjoyment of sports and leisure. With respect to results, it is recommended to establish sports and recreational sites for development of elderly sports.

Keywords: sports, leisure, elders, challenges, solutions

1. Introduction

According to calculations of global organization of health, during the next fifty years, the elder population of developing countries will be increased up to 9 times. In addition, the elder population will also have a great increase in developed countries as well (Madah, 2010). Sports is a social right for every human. In 2003, the United Nations announced sports as a social right and stated that having an opportunity for participation in sports and physical exercises is a human right and that governments are obliged to provide everyone with the opportunity for sports participation (Tondnevis, 2000).

The purpose of health promotion programs is not merely to improve the quantity of life, but also they are aimed at promotion of qualities of life as well (Min Hat et al., 2014). Nowadays, as a result of increased life expectancy in many countries, the quality of life among elders has become a major challenge in human societies. As people age, they become more susceptible to development of specific diseases. The greatest threat for elders is lack of movement which makes them prone to diseases more than other factors. Elders are considered as one of the most important target societies in the world of sports, however increasing elders' sports participation have been more or less neglected (Li et al., 2011). Physical activities and sports leave several positive effects on our life qualities, health, life expectancy, mental stability and self-confidence (Siberian, 2004).

As the machine life grows and movement poverty prevails and leaves its numerous negative effects, as an element that can compensate this movement poverty, sports has become the center of many attentions (Hekmati et al., 2014). The new welfare movement emphasizes on efficient use of leisure times and its role in physical and mental health as well as prevention of several diseases. According to scholars, this movement requires proper sports activities for obtaining a healthy life and prevention of different diseases and illnesses (Chang et al., 2014). Mc Olly et al. (2005) and Diner et al. (2005) have stressed out that a short period of physical activity improves the life quality of elders and in long periods, it improves the feeling of well-being. Recognition of the way elders pass their significant amounts of leisure time and detecting their recreational and sports activities is the first step

towards a proper recreational and sports planning for them. In addition, it is necessary to carry out a suitable planning in order to fulfill their needs. Some demographic variables including gender, marriage status, housing status and education are considered as factors which might be related to elders' health. Findings resulted from studying elders revealed that there are differences between females and males in every aspect of health (Alipoor, 2008).

Asefzadeh et al. (2010) have concluded that municipalities, governmental organizations and the media should prepare programs for benefiting from abilities and capabilities of elders of the society. Nonetheless, factors such as gender, social and economic status as well as total life status are effective on the amount of an individual's activities (Ahmadi, 2011). Findings have revealed that older families require less expenses for passing their leisure times compared to younger families. In addition, the amount of time spent on active leisure and sports activities reduce as the individual's age exceeds 44 (Dahashti, 2006). Noorbakhsh et al. (2011) have carried out a research and in their research they have stressed out significant differences in factors of participation motivation according to gender, age groups, education levels and career groups. Although that during the past few years, significant steps have been taken towards improvement of sports facilities for women, but still women are challenged in this context and are not supplied with adequate facilities equal to men. This fact leads them to spend their leisure times on watching television, doing hand works, talking, sitting in the allies, listening to music and studying. This is while men mostly spend their leisure times outside the house. Researchers have indicated that more than 90 percent of elders have significant amounts of leisure time and most of them (97%) watch television in their leisure time. In addition 67 percent of these elders take part in sports activities (Afzali, 2006).

Chaman Pira et al. (2015) have stated that performance of physical activities plays a significant role in satisfaction from leisure times among elders. In 20th century, the main challenge was to keep alive, but in 21st century, is to have life with better qualities (Sanaei et al., 2014). Discussing the relation between lifestyle and mental health among elder men and women indicates that having a healthy lifestyle promotes mental health among elders (Anderson et al., 2011). Previous studies in Iran indicate that elders have a relatively low awareness regarding having a healthy lifestyle and its effects on promoting a healthy mind and body. In addition, these people's lack of awareness about methods of having a healthy lifestyle causes them to manifest unhealthy performance towards promotion of a healthy lifestyle (Samadi, 2007). Moschini et al. (2011) have stated that elders' barriers towards participation in sports activities include weak health, lack of a company, lack of interest, lack of sport opportunities and lack of transportation facilities.

Hatton et al. (2009) and Garber et al. (2011) have concluded that activities that can be performed for optimization of elders' sports participation include giving instructions on requirements of exercising and the obtained advantages, improvement of incentives and self-efficacy through supporting health and improvement of supplying activities and reformation of qualities and publicizing the training programs including development of class environments by using experienced coaches in order to assure the security of these elders. Karimi et al. (2011) have concluded that having regular walks in addition to an effective amount of exercise can provide the contexts for improvement of quality of life of elders. On this basis, it is recommended to design systematic physical activities under the surveillance of experienced and aware coaches according to the findings of these researches. Cardenas (2009) and Valenzuela et al. (2009) have counted the limiting factors of participation in sports activities as lack of proper health, fear of injury and lack of facilities. In the current era, the need for sports and physical activities is felt more than ever and also, in developed societies, sports is both considered as an element with effects on health, well-being and mental health and studied as a social phenomenon. In the view of experts, in current societies, sports is considered as a human-training count and is rapidly growing among all classes of the society (Minhatt et al., 2014).

Moran et al. (2014) have carried out a research regarding perception of the relations between physical environment and physical activity among elders and concluded that environmental factors including infrastructures of sidewalks, access to welfare facilities and environmental conditions can be effective in elders' physical activates. Ramezanejad et al. (2010) have stated that among elders (over 60 years), the motivation of enjoyment, health and physical preparedness and social interactions are considered as the highest motivations for sports participation. Richard et al. (2008) have also signified illnesses and physical weaknesses as restraining factors for physical activities. Other researchers have also divided these restraining factors in two personal and environmental groups. The most important environmental restraining factors included high expenses of sports programs, lack of awareness about the existing sports facilities, lack of sports knowledge, lack of energy, lack of motivation, laziness, and lack of interest, lack of time and difficulties of performance. Having regular physical activities is caused by mental-social and environmental factors (Santos et al., 2012).

In addition, efforts towards institutionalization of the culture of sports can lead to improvement of elders' health and their lifestyle through promotion of leisure times (Anooshe et al., 2011). The researcher in this study is after recognition of challenges faced by planning for elders' sports activities, discussing their current problems for participation in sports activities and investigation of the current situation and ultimately, providing suitable solutions for development of recreational sports among elders. Nevertheless, organizations including municipalities, organizations of sports and youth, the organization of welfare and other organizations which are somehow related to elders, their welfare and health can consider the results of this research as a basis for their future plans. One of the main questions of this research is that what the challenges for development of elders' sports are and what the solutions are for overcoming these challenges and barriers?

2. Materials and Methods

The research is survey-descriptive and has conducted as field method. The data population were men and women aged over 60 years in the western provinces of Iran at 2015 that their number is 750,000 people according to statistics taken from official authorities. Among the population the 2540 people were selected using Morgan table. Sampling method was accessible method. Researcher made questionnaire was used for data collection which contained 30 item in the 5 item Likert scale. The validity of questionnaire confirmed by 11 people of sport management professors. The reliability of the questionnaire was obtained 0.74 using Cronbach's alpha. Descriptive statistics indexes (Mean, standard deviation, and percent) and Chi-squared test were used for analyzing data.

3. Results

Table 1 indicates the elders' leisure activities.

Table 1. Description of elders' recreational and leisure activities

Questions	Standard Deviation	Average	Rank
Watching television and listening to radio	1.51	3.61	1
Performance of religious practices	0.59	3.45	2
Talking with friends	1.22	3.26	3
Walking and sitting	1.77	2.81	4
Playing and exercising	0.03	1.2	12

Results of Table 1 indicate that with respective average and standard deviation if 3.61 ± 1.15 , listening to radio and watching television is in the first rank. In addition, with an average and standard deviation of 3.45 ± 0.59 , performance of religious practices is in the second rank. Talking with friends with average and standard deviation of 1.22 ± 3.26 is in the third rank and walking and sitting with a standard deviation and average of 2.81 ± 1.77 is in the fourth rank and finally, playing and exercising is in fifth rank.

Table 2 indicates the variables of sports activities.

Table 2. Variables of sports activities

Variables of Sports Activities	Abundance
Performance of sports activities	32.3
Training in presence of a coach	14.5
Wearing sports outfits	17.2
Existence of sports facilities in the immediate neighborhood	11.0
Type of exercising (singularly)	15.9
Time of exercising (early morning)	9.1

Table 2 indicates that among the respondents, 32.3% exercise 14.5% do their exercises with presence of a coach, 17.2% of respondents use sports shoes and outfits while exercising, 11% of the respondents think it is necessary

to have sports equipment specific to elders, 15.9 percent exercise singularly and 9.1 percent of them also practice in the early morning.

Table 3 indicates the relation between elders' sports activities and other variables.

Table 3. Results of the Chi-squared test

Independent Variable	Dependent Variable	Chi- Square Value	Freedom Degree	Sig
Elders' life quality	exercising	28.43	5	0.00
Access to sports facilities	exercising	25.34	7	0.00
Satisfaction from leisure activities	Type of sport activity	61.12	15	0.00
Satisfaction from life quality	exercising	26.76	7	0.00

The results of Table 3 indicate that there is a significant relation between elders' life quality, access to sports facilities and satisfaction of life quality and exercising. There also exists a significant relation between elders' satisfaction from their leisure time and their type of sports activity.

4. Discussion and Conclusions

Results indicated that there is a significant and meaningful relation between access to sports facilities and exercising among elders. These results are consistent with results obtained by Sallies (1999), Dorgan et al. (2003), Richard et al. (2008), Cardenas et al. (2009), Madah and Imami (2009), Madah (2010) and Chaman Pira (2015).

In addition, Cardenas et al. (2009) and Richard et al. (2008) have also pointed out the significance of existence of sports facilities for attracting elders towards sports participation. In addition, two important economic factors including lack of money and facilities are recognized as major barriers of sports participation (Journal of analysis of elderly issues in Iran, 2008). One of the main public ways for prevention and even treatment of inabilities caused by age is to develop sports facilities for elders and also to persuade elders towards having physical activities suitable for their age. This practice is seriously followed up in developed and advanced countries.

There was a significant relation discovered between elders' life quality satisfaction and exercising. These results are consistent with the results obtained by Necho (2006), Valenzula et al. (2009), Placious et al. (2011), Ziapoor (2013), Asef et al. (2010), Ahmadi et al. (2011) and Sanaei et al. (2014). Currently, human societies are moving towards an era in their life which is termed as leisure civilization. The new organization of welfare has emphasized on using leisure times and their effects on mental and physical health of individuals. People who do not have any control over their life-style will face agonizing diseases and early death (Hamidi & Ahmadi, 2009).

Several researches have shown that an individual's bewilderment in his or her leisure time, especially in environments filled with stressful factors will cause several crises in personal and career lives. It has also been turned out that spending time on healthy recreational activities, especially sports activities has several positive and advantageous effects (Safania, 2002). Feeling satisfied is a main feature of leisure. Seeking an activity for spending our leisure time is highly important that if the person's satisfaction is not realized, it will be senseless (Bahram, 2002).

Leisure times are not restricted to a certain age or gender and every individual requires some time for leisure in their daily lives (Rasooli et al., 2013). Therefore, providing a suitable condition for more activity which on the one hand amuses elders and fills their leisure time and on the other hand, fulfills their need for movement is one of the most important measures which should exist in elders' leisure planning. No only exercising is accompanied with several physiological benefits, but also it has several other beneficial advantages among which it can be referred to improved self-confidence, mental happiness, making contact with others, prevention from shyness and etc.

A significant and meaningful relation was detected between elders' life satisfaction and exercising. These results are consistent with the results obtained by Borzoo et al. (2012), Kargar et al. (2013), Badri et al. (2014), Hojjati et al. (2015), Rijsky et al. (2008), Mayor Jam et al. (2010), Hodakava et al. (2011) and Rion Sung and Ran Sung (2014).

Although that in the view of elders from different countries, cultural differences are considered as main causes of differences in different aspects of life, but by controlling the status of health and age, the role of these cultural factors loses its strength. In other words, although that several researches have pointed out the direct role of health status on life quality, it should be mentioned that health status affects elders' perception of the importance that they give to different aspects of life quality. In this regard, as an elder's health status is improved, he or she will have a better understanding of the issue of life quality and its different aspects (Mulzan et al., 2014). Relative improvement of life quality and improving social welfare will provide the contexts for thinking and finding better solutions for wellbeing (Tondnevis, 2003).

Life quality is considered as a main index and since it embraces several aspects such as physiological dimensions, performance and the being of the person; it is highly important to pay attention to it (Killer et al., 2010). Results of previous studies indicate that as mature people gain more awareness regarding the importance of physical preparedness, they put more efforts towards realizing it. Currently, with respect to a plenty of worthy and beneficial information, mankind has realized that a healthy lifestyle is definitely the key to success and having regular exercises is considered as a necessity for having a healthy life (Richard et al., 2008).

In addition, efforts towards institutionalization of culture of exercising can lead to improvement of health and lifestyle of elders through promotion of elders' leisure times. Findings of this research have shown that recreational and leisure exercises play a significant role in satisfaction of elders from leisure times and their life. Also light and recreational sports should be taken into account. Therefore, authorities should take steps towards development of elderly sports through establishment of sports facilities in order to witness the flourishing of elderly sports in west of Iran.

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Investigation of the Effects of the Company's Capabilities on Attracting External Collaboration and Company's Performance

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Abstract

One of the major tasks of the managers is achieving the coordination between the company and external environment to enhance the company's financial performance. This research aimed to focus on attracting external effective collaboration, and first investigate effects of three capabilities of innovation, information, and relational on it, and then examine the effect of this factor on market and financial performance of the studied companies. At first, the variables of innovation capability, information capability, relational capability, company's financial performance, company's market performance, and also attracting external effective collaboration were studied in the review of literature. Then, a questionnaire was designed and distributed among the companies that were participated in Tehran international exhibitions and collected data was analyzed by correlation coefficient tests and structural equation modeling. To analyze the data Excel, SPSS, and Amos software were used. Findings showed that the relational, information, and innovation capabilities of company can increase companies financial and market performance through attracting external collaboration.

Keywords: innovation capability, information capability, relational capability, attracting external collaboration, financial performance

1. Introduction

One of the major issues that managers face these days is trying to balance between the intensity of competition and the company's properties (O'Cass et al., 2007). It is the duty of the managers to achieve coordination between company and external environment to enhance the company's financial performance. Since the adoption of different approaches of measuring the performance may generally lead to identifying the strengths and weaknesses of the companies, however, financial and market performance reveal the company's success in the market; these two factors are measured by several ways and approaches (Weerawardena et al., 2006). Studies show that about 70 percent of the company's revenues are attributable to market performance and the brand. Therefore, organizational performance and market performance have a close relationship with each other (O'cass et al., 2009). Identifying the factors that affect its performance, directly or indirectly, has dual significance: first, a context is created to develop unique ways to present greater values to customers. Second, we can simultaneously achieve the organizational internal effectiveness and appropriate compliance with the external environment (O'cass, 2006).

Peter Drucker believes that a company has to main tasks: innovation and marketing. Marketing in the organization is visible in the concept of market orientation. Market orientation causes the organization to be informed of market trends and customers' demands (the tool of these two issues is information capability and relational capability) and achieve market share through innovation in producing the products according to the customers' desires. It can be concluded that organization marketing is resulted from information and relational capabilities.

The capability of attracting external effective collaboration is one of the characteristics of successful marketing which according to Wang et al. (2005), it can be affected by innovation capability, information capability and relational capability (effective factors on marketing), this effect can be transferred to financial performance and market performance, yet. So it will play a mediating role.

In today's business environment, companies need external sources of information and capital to upgrade and improve their performance and innovation (Morgan & Berton, 2008). Even in industries where access to information is very convenient, companies are facing with great difficulties to access information. To overcome such shortcomings, companies should develop their relational and information capabilities which are consisted of the ability to recognize the value of new information, integrate and use it for commercial purposes (Powell et al., 1996). The notion of relational and information capabilities is one of the stimuli of companies competitive advantage (Ketchen et al., 2007). It should be noted that no research explains the role of relational, information, and innovation capabilities in the performance and attracting external collaboration so far. The weakness of relational, information, and innovation capabilities leads in decreasing their ability to compete with potential and actual competitors, lack of understanding the needs of customers and finally decline in the position of the company in the market (LaBahn, 2000).

In today's business environment, those companies will be successful that beside using internal sources of capital in their company, identify their external sources of capital and benefit from these sources in order to achieve the organization's goals and satisfy the needs of its stakeholders. Companies' failure in identifying and attracting external collaboration leads to the failure of companies' strategic decisions, failure in innovative programs, and weak ability of the company in research and development activities (Ghaem et al., 2005).

Considering the above mentioned issues, it can be noted that this study by focusing on attracting external effective collaboration investigates the impact of innovation, information and relational capabilities on it and then analyzes the impact of this factor on the studied companies financial and market performance. It is noteworthy to mention that no study has been done on this content in our country. Hence the research question is as follow:

What are the effects of company's capabilities on attracting external collaboration and company's performance?

2. Research Background

2.1 Innovation Capability

Innovation capability provides external collaboration through two ways: first, the basis of internal knowledge and absorption coefficient for each company to assess and attract the resources of partners to build a competitive advantage (Zahra & George, 2002), is the companies with higher innovation capability to benefit from this collaboration and they can develop their internal capabilities better and strengthen it (Powell et al., 1990) and therefore have a greater incentives to cooperate. Second, innovation capability helps to attract the partners. Companies of the partners enter the business relations potentially with the hope of getting access to complementary resources which they themselves cannot have the access to IBID. Focal innovation capability of the company is considered as an evidence for the potential partners when they decide to collaborate with the company (LaBahn, 2000). In accordance with these reasons, the experimental results show that the vendors cooperate more in cooperative relations in product development with knowledgably customers (Athaide et al., 2003). If the company's innovation capability is greater, the company's attractiveness will increase and it causes more partners tend to collaborate and it leads to more effective collaboration.

2.2 Information Capability

External partners are necessary depending on their information infrastructure to access the data in collaboration (Ketchen & Hult, 2007). Central technology of the company which is based on the information capability leads to internal correlation of the company and real time connection (Seggi et al., 2006). If the company invests on an advanced information technology and uses it for creating and exchanging of important information, this creates trust and credibility among the partners. Commitment to protect their information ensures the partners that the information and exchange of their information are safe, reliable and tidy and will lead to an increase in the probability of success in the collaboration. Experimental results show that information capability affects company's performance through supply chain programs and relation with customers and vendors (D'Avanzo et al., 2003). Fawcette et al. (2011), have show that the largest shares of information technology make the supply chain collaborations more dynamic.

2.3 Relational Capability

There are three reasons why relational capability is important for collaboration: first, relational capability makes the company to distinguish between collaborative and trading relations and manage them according to different governmental mechanisms. Therefore, it can protect itself against opportunism and risks (Day, 2000). The company is also able to protect its intellectual investments and assets, and benefit the collaboration (Ghaem et al., 2005). Second, while information capability is useful in collecting and transmitting the recorded information,

relational capability facilitates tacit knowledge sharing in organizations' body through creating relational sovereignty and informal relational channels (Lorenzoni & Lipparini, 1999). Capability to share the tacit knowledge within a network leads to improvement in directing and an increase in collaboration success chance (Dyer & Singh, 1998). Third, designing effective mechanisms of relational and contractual sovereignty is considered as a valuable resource for the partners because it ensures them that it tries for a fair and productive collaboration (Ghaem et al., 2008). Relational capability ensures the partners that relational problems can be solved as a minimum, avoidance or fairly and not be unfair on the right of the partners (Feng et al., 2008). The same as innovation capability, relational capability also can attract potential partners to collaborate and make the company benefit this collaboration.

2.4 Collaboration and Performance of the Company

Companies collaborate with each other to achieve more markets and better financial performance. While financial performance considers company's sales growth, profitability and capital return, market performance means introducing new product to the market, market extension and penetration, increasing the quality and customer satisfaction, in comparison with the competitors in that industry. Previous studies show that effective collaboration of a company can improve the market and financial performance through several methods (Faems et al., 2005). First, collaboration enhances the partners' access to the complementary resources, capabilities and other resources that potentially improve market performance. Second, collaboration accelerates the transfer of codified and tacit knowledge and reforms the innovation process of the company. Third, collaboration results in identifying new sources and practical applications, lower development costs, shorter development cycles, reduction in financial risks, better targeting, and increase in customers' rights (Athaide et al., 2003). Researches on both supply chain and market collaboration have shown that collaboration leads to high levels of value creation and customer satisfaction (Allred et al., 2011).

Value creation resulted from collaboration, directly affects company's performance (Hult, Hurley, & Knight, 2000). New products and markets enhance the possibility for increasing market share and income. Improvement in the quality of products and services increases the customers' satisfaction, loyalty and retention and also increases sales, decreases the costs to attract and retain the customer, and enhances the share of market (Allred et al., 2011).

Youn et al. (1982) and Bradley et al. (1984) in their studies conclude that companies working in the sectors of pharmaceutical, electronics, food and equipment have low ability to raise capital, while the companies working in the sectors of cement, ceramic tile, paper and metals have high ability to attract the capital.

Riding et al. (1994), show that manufacturing companies have lower access to banking international credit compared to non-manufacturing companies.

Also, the results of Welsh and White (1981), and Wender Wijest (1989), have show that manufacturing industries need major investment in fixed assets that are financed by debt and shareholders rights.

Chung (2004) discusses key economic variables such as changes in interest rates, changes in inflation rates, and the effects of investment alternatives. He also studies affecting social and potential variables such as local and regional developments and political changes and psychological components such as effect of news diffusion and rumors in macro level. At the level of micro components, the effectiveness of the financial ratios and the risk and stock returns is investigated. Based on the results of this study, affecting factors on external investment are categorized into two forms: macro variables including social and economic factors, and micro variables including company's financial and management factors. In a study, Moore (2005) studies the relationship between innovation and attracting capital flows in hotel industry. Statistical sample size was 175 employees of Australia. Their findings show that attracting investment in each hotel is affected by innovation capabilities, employees learning, employees' education and hotel's interaction with its stakeholders.

Carmen and Jose (2008), in a study titled "the role of organizational innovation and technological innovation in the relationship between market orientation and performance in cultural organization" investigate the mediator role of innovation in the relationship between market orientation and economic and social performance of the museums. In this experimental study, data collected from 276 museums (135 museums in Spain and 141 museums in France). Data analysis was performed using structural equation modeling and path analysis. The obtained results show that market orientation affects either directly (0.36 coefficient) or indirectly (with mediating role of innovation and 0.13 coefficient) the performance. In addition, innovation (with .041 coefficients) will have a direct impact on performance. This will suggest that museum managers should apply organizational innovation and technological innovation in their marketing models to improve economic and social performance. Subramanian (2010) study the relationship between market orientation and business

performance in 159 intensive care hospitals in the United States. To measure the marketing orientation, structured scale of MAKTOR is used and business performance is examined by the scales of revenue growth, return on investment and profit margins; after testing the hypotheses, the results show that there is a positive relationship between market orientation and business performance in these hospitals (Subramanian, 2010).

Tsiotsou (2010) studies the relationship between market orientation and service performance in 329 tourism industries in Greece and Lithuania. To measure market orientation, MAKTOR scale is used and services performance examined considering the quality of services and variability of services; after testing the hypotheses, the results show a direct relationship between customer orientation and service performance, and an indirect relationship between competitor orientation and intersectional coordination with services performance (Tsiotsou, 2010).

Goedhuys and Veugelers (2010), in a study analyze the capacity to attract investment and its affecting factors. This study combines the results of more than 60 researches to determine the effects of individual, demographic, work and non-work factors related to the capacity to attract the investment. As predicted, working factors had stronger relationship with the capacity to attract the investment compared to the other factors; on the other hand, non-work factors had a stronger relationship with innovation. Demographic factors such as marital status and sex of employees had a relatively weak relationship with fundraising capacity. Generally, analyses support this hypothesis that fundraising capacity has unique factors and then requires different interventions or solutions.

Hua and Lee (2014) have done a research titled “investigation of the relationship between company’s capabilities and financial performance in small businesses”. The aim of the study was to investigate the relationship between relational, information, and innovation capabilities and financial performance in small businesses. Statistical sample of their study included 62 small companies in China. The findings show that companies various capabilities has an impact on the financial performance of small companies.

Wang et al. (2015), in their study examine the impact of company’s capabilities on attracting external collaboration and company’s performance in Chinese companies. The findings show that company’s capabilities affect attracting external collaboration; external collaboration, in turn, leads to improved market performance and financial performance of the company. In addition, the effect of market performance on financial performance is confirmed. It should be mentioned that this study was the researcher’s resource in doing this research.

2.5 Research Hypotheses and Research Model

Research Hypotheses

- 1) Innovation capability has a significant impact on attracting external collaboration effectiveness.
- 2) Information capability has a significant impact on attracting external collaboration effectiveness.
- 3) Relational capability has a significant impact on attracting external collaboration effectiveness.
- 4) Attracting external collaboration effectiveness has a significant impact on company’s financial performance.
- 5) Attracting external collaboration effectiveness has a significant impact on company’s market performance.
- 6) Market performance has a significant impact on company’s financial performance.

Based on performance-practice-source framework (Ketchen et al., 2007), and considering Wang et al.’s (2015) study, conceptual model of the present study (Figure 1) shows that three dynamic capabilities make the company to adopt external collaboration strategy. Collaboration efficacy has a mediating role between capability and performance. Considering the research questions and hypotheses, research model is presented as follow:

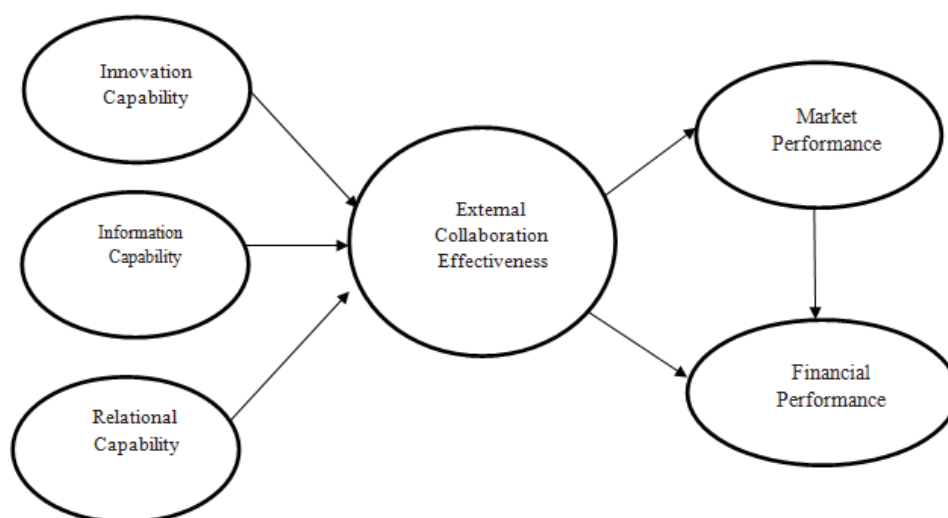


Figure 1. Research model

3. Methods

This study is applied research, and given the time of data collection, it is descriptive-survey (cross-sectional), and data collection instruments a questionnaire that is translated according to the research of Wang et al. (2015), and after evaluating its reliability, it is used to measure the research variables. The population of this research includes companies that participate in Tehran international exhibition. To determine the optimal number of sample Morgan table is used. Since annually more than 60000 local companies participate in Tehran international exhibitions, sample size is 384 according to Morgan table. After completing the questionnaire and collecting the required data from field survey using correlation coefficient and structural equation modeling approach, model's factors and their relationship have been identified and reported. It should be noted that in this study, Excel, SPSS, and Amos 22 software are used. For confirmatory factor analysis and path analysis, a model has been fitted which is according to the theoretical foundations of the study.

4. Results and Findings

Based on the descriptive findings of the study, 3.3 percent of respondents are less than 35 years old, 25 percent are between 36 and 40 years old, 25 percent are between 41 and 50 years old, 31.1 percent are between 46 and 50 years old and 9.4 percent are more than 50 years old and 6.1 percent have not answered this question. Also, 33.3 percent of the respondents are female and 60.6 percent are male and 6.1 percent have not answered the question. 31.4 percent of respondents have a bachelor's degree and 65.5 percent have a master's degree and in this section 3.1 percent have not answered the question as well. And finally, 3.3 percent of the respondents have job experience of lower than 10 years, 25 percent have between 10 to 15 years, 18.6 percent have between 16 to 25 years, 25 percent have between 21 to 25 years, and 21.9 percent have more than 25 years of job experience. 6.1 percent have not answered this question.

According to the descriptive data on the research variables (mean, standard deviation, maximum and minimum point) for the studied variables calculated in accordance with Table 1.

Table 1. Descriptive data of research variables

Variable	Mean	Standard Deviation	Maximum	Minimum
market performance	3.035	0.463	5	1
financial performance	3.016	0.641	5	1
external collaboration	3.006	0.478	5	1
innovation capability	2.99	0.339	5	1
relational capability	2.960	0.336	5	1
information capability	3.164	0.416	5	1

4.1 Testing the Naturalness of Variables

The results of the research data naturalness are summarized in Table 2. According to this table, the values of Kolmogorov-Smirnov test and significant values for the variables the studied hypotheses are given.

Table 2. Naturalness test of the data of research variables

Variables	Kolmogorov-Smirnov	Sig.	N=360
Market Performance	0.947	0.331	normal
Financial Performance	0.888	0.409	not normal
External Collaboration	0.933	0.349	normal
Innovation Capability	10.93	0.183	not normal
Relational Capability	0.951	0.327	normal
Information Capability	0.987	0.215	normal

As it is shown, the significance level of the variables is more than 0.05 and the null hypothesis is confirmed. Therefore, data on variables are natural. In this study, we are permitted to use parametric tests.

4.2 Calculating Correlation Coefficient

According to the naturalness of the variables, Pearson correlation method to test bi-directional relationship between the research components has been used.

Table 3. The correlation between the underlying constituents of hypotheses

Statistical Index of Variable	Coefficient Correlation	Sig.	Number
innovation capability and attracting external collaboration effectiveness	0.981	0.000	360
information capability and attracting external collaboration effectiveness	0.957	0.000	360
relational capability and attracting external collaboration effectiveness	0.901	0.000	360
attracting external collaboration effectiveness and financial performance	0.760	0.000	360
attracting external collaboration effectiveness and market performance	0.959	0.000	360
market and financial performance of company	0.944	0.000	360

In correlation matrix (Table 3), the correlation coefficient of the factors of the research are presented. Given the 95% confidence level and the level of significance of the Pearson correlation coefficient test (which is 0.000 for all the studied relationships and is less than the assumed value 0.05), it can be concluded that the studied relationships (lack of relationship between innovation capability and attracting external effective collaboration, information capability and attracting external effective collaboration, relational capability and attracting external effective collaboration, attracting external effective collaboration and financial performance, attracting external effective collaboration and market performance, market performance and financial performance of the company) are accepted. In other words, examined items in this study are confirmed. Since the value of all these correlation coefficient are positive, it can be said that these variables change in each other direction, i.e., if one of them increases, the other one will increase as well.

4.3 Sample Adequacy Test

One of the prerequisites of using LISREL structural equations is testing the sample's adequacy, which KMO adequacy sample test is used to examine it.

Table 4. Sample adequacy test

	sample adequacy test	0.914
	Kroit-bartlet test indicator	35.367
Kroit-Bartlet test	degree of freedom	0.231
	Sig.	0.001

The value of sample adequacy is 0.755. So the sample is suitable for using structural equation. Generally, high values (close to one) suggest that factor analysis is applied to the data. If this value is less than 0.5, the results of factor analysis will not be useful for the data.

4.4 Fitness of Research Models

For research structural equation modeling AMOS 22 software is used. For confirmatory factor analysis and path analysis, a model is fitted which is in accordance with the theoretical foundations of the research. The data obtained from this software is explained in the following section. Figure 1 shows the output of AMOS 22 software. Figure 2 shows the standardized coefficient of the model.

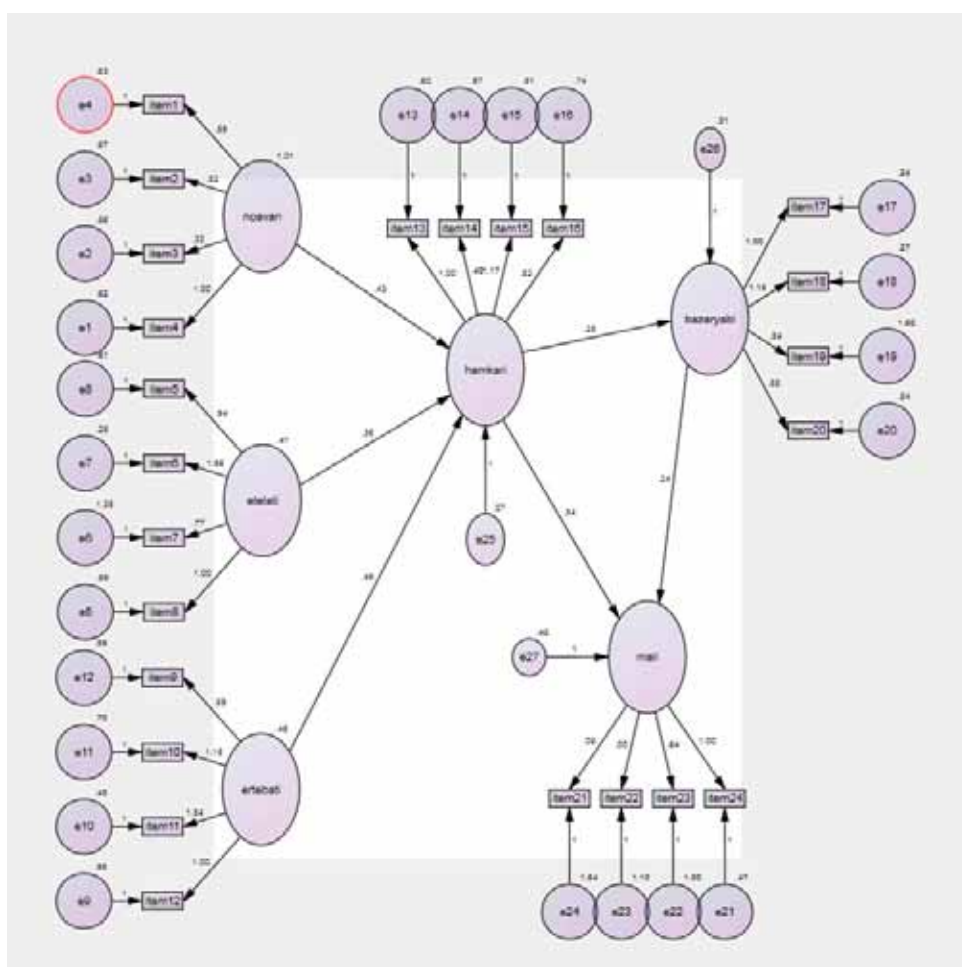


Figure 1. Model of the relationship between company's capabilities with attracting external collaboration and impact on financial and market performance of the company in non standardized mode

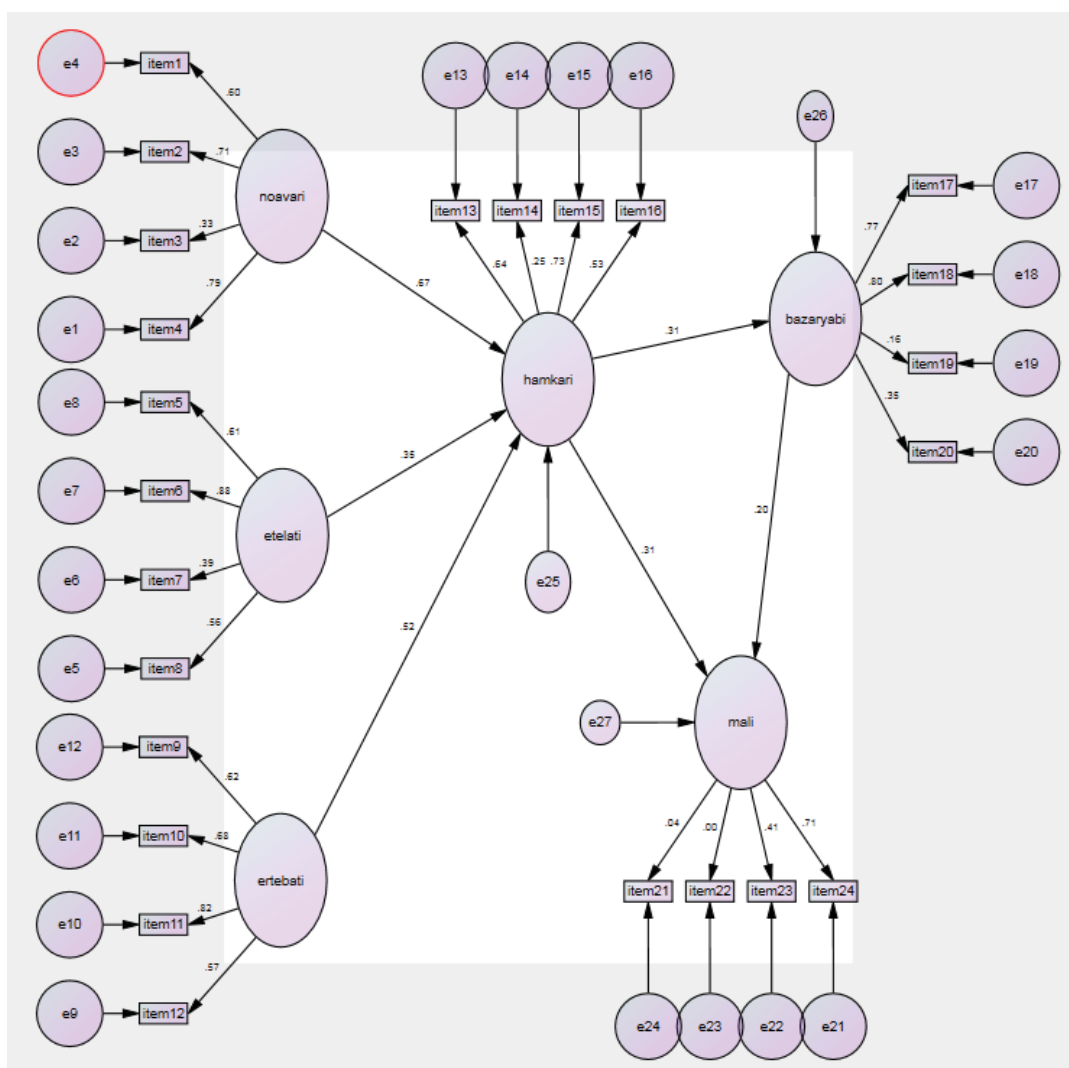


Figure 2. Model of the relationship between company's capabilities with attracting external collaboration and impact on financial and market performance of the company in standardized mode

Standard estimation values of factor loadings which are calculated using maximum likelihood method are shown in Figures 1 and 2. Then, components of the model's well-fit have been reported. Fitness of the model means that the observed variance-covariance matrix or the predicted variance-covariance by the model should have the values close to each other or have fitness. Whatever our values are closer to each other in two matrixes, the model has more fitness. In structural equation modeling when the model is fit enough, we can trust the model's estimations.

Table 5. Fitness indicators of the first model

Indicator	Accepted Domain	Value	Result
RMSEA	RMSEA<0.09	0.000	confirmed
GFI	GFI>0.9	0.987	confirmed
AGFI	AGFI>0.85	0.966	confirmed
CFI	CFI>0.90	0.01	confirmed
IFI	IFI>0.90	1.056	confirmed

Used fitness indicators indicate that this model has proper fitness; therefore it has a high ability to measure the relationships between the components of research. Because the model is standard, the results of the study are reliable. All the hypotheses studied in this research can be proved based on the original model of the research presented in Figures 1 and 2.

5. Discussion and Conclusions

External collaboration is a key instrument in completing the activities that lead to internal organizational value creation and increases its competitive advantage, because in an economy based on knowledge and network, innovation is not located within the company but it is outside the company and is among its external partners (Powell, 1990). Collaboration can be considered as independent and close performance relations that are characterized by interactivity, open and direct relationships, supporting experience and innovation and having goals of common interest for all partners.

Dynamic capabilities of the company are categorized into three groups. The first group is associated with innovation and researchers have found that technological capability and innovation are involved in product design, new product development and business innovation. The second group of information management which mostly get use of gap edge information technology to improve communication, collection, analyses and dissemination of market information and navigation within the enterprise and between partners is formed (Nekara et al., 2011). The third group consists of raising and managing external relations. In this group, the studies seek for alliance ability, marketing capability, and relational capability (Allred et al., 2011). These three kinds of capabilities mostly cover the process of cross-functional business related to collaboration within the company including new product development, operation, property management, activities related to production and distribution, customer communication management and vendors' communication management. To get access to more markets and better financial performance, the companies collaborate with each other. Where the company's financial performance refers to sales growth, profitability and return of capital, market performance can be as presenting new products to market, market expansion and penetration, increasing quality and customer satisfaction compared to competitors in the same industry. Previous studies have shown that effective collaboration within a company can improve the market and financial performance in several ways (Ghaemz et al., 2005).

Collaboration increases accessibility to complementary resources, capabilities and other resources which potentially improve the market performance. Secondly, codified and tacit knowledge transfer is accelerated by collaboration and reforms the company's innovation process. Third, collaboration leads to identify new resources and applications, reduce development costs, shorten development cycles, and reduce financial risks, better targeting and increase customers' rights (Allred et al., 2003). Studies in both supply chain and marketing have shown that collaboration leads to high levels of value creation and customer satisfaction (Allred et al., 2011).

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Discussion Intervention of Internal and International Merchant from Foreign Investment Law and New Draft Trade Law of Iran

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Abstract

The law makers are trying to compile special and independent commerce law pertinent to each other in the form of law for attracting foreign investment in their countries to grow foreign commerce and attract foreign investor and merchant.

Comparative discussion of law maker point of view in “foreign investment law approved 2002 of Iran” and “new draft trade law of Iran approved 2011” from legal definition of foreign investor and merchant especially in cases pertinent to intervention and referred to each other are of the most important issues of this article.

Based on result, as for necessity of attraction Iranian and Non-Iranian merchant by investment with foreign origin, criticism was taken to the new draft trade law of Iran approved 2011 as new law which fundamentally should have dynamic and reliability property based on the needs of modern business and international trade, lack of explicitly pointing to legal gap about legal discrimination between foreign investor and Iranian investor qualified is in the form of foreign investor which in these conditions Iranian investor must be have legal description merchant in discriminatory approach that it is between an Iranian and foreign investor in terms of providing documentation from Iranian and this legal description must be evaluated from a legal standpoint by new draft trade law of Iran approved 2011, to benefit from Iran’s foreign trade facilitation and the way of law enforcement is contrary to the manner of foreign investment and this is the other ambiguity cases law which is discriminate with foreign investment low and needs restoration.

Specifically suggest this article, separation, adding and determine the condition of subjects the definition of foreign investor and merchant and clarification of the relationship between foreign investment law approved 2002 of Iran and new draft trade law of Iran approved 2011 as commercial law.

Keywords: merchant, foreign investor, foreign investment law, new draft

1. Introduction

Collections of the patterns which form commerce laws are under two concepts commercial practices and merchant and commercial representative (Erfani, 1996). Due to the importance of two concepts in the legal systems of trade the definition of law by agent or person who commerce is conducted in accordance with the relevant law has Particular importance, and legally be commercializing activities causes advantages and limitations and use of facilities on someone who is consider merchant. In this article, the view of two related legislation and different of Iran in the sphere of trade that foreign investment law approved 2002 of Iran and new draft trade law of Iran 2011 been paid to conformity merchant definition or investor and it was discussed any type of interference of cases and need refer to each other about identify a person as merchant or investor.

From previous years that the commerce laws in effect international necessity from the prospective countries of law makers have been international approach. Despite of interesting in maintain national and native resources, try to consider commerce law in the form of necessities and international strategies and conclude infra-national contracts. Thus, the importance of commerce and role of rules governing on causes to is prompt promotion welfare of the people of the countries and they are trying more compared to the past to expand the vital of discussion trans-border commerce are economic planning.

The importance of this fundamental principle cause to countries rules codification from type of commerce with literature beyond from national commerce of law limited into the country (Firuzi & Babagadri, 2010) until

commerce laws in the concept of economic and legal literature today not to limit into borders and its scope to outside its borders and reach in international borders and are subject to relationship that the countries have at this level because commerce concept and lost past meaning limited in to the country (Rezzad & Hacıyev, 2001) and find its concept by tearing into internal borders and finds the key for developing economy into substantial development and attract capital (Poirson, 1998), today, the commerce which is successful and dynamic which plays vital role in order to develop country and shows qualitative commerce law for country in order to attract foreign investors (Abramovitz, 1986) and scale of foreign commerce and infra international investment is regarded as one of the steps of substantial development of countries which require special laws to cover contents of commerce law from international point of view in order to develop its aims (Rostamzadeh, 2012), in Iran, law for encouragement and protect from foreign investors in order to growth of international commerce law was approved at 2002 which this law has gaps regarding the definition Iranian merchant for this reason it cannot use the benefits of foreign investment and facilities, because of this gap, must be referred to other laws including the new draft trade law of Iran approved 2011. We try to discuss legal gap from this point of view.

Different laws of countries want to offer definition in terms of legal processing and affecting factors the issue.

In first articles, the subjects are discussed to offer suitable image from it to render respect of citizenship law and foreign persons accurately (Rostamzadeh & Agli, 2015), thus, necessity and importance of commerce law is so vital and in the first articles of the law, there is a legal definition merchant traders and investors (Karu & Dominik, 2004). Of course, there are issues related to foreign investment and international trade in commercial law in developed countries, however, all countries have set of rules complementary and separate under the foreign investment law and International investment agreements (Abramovitz, 1986). Due to the importance and many benefits of foreign investment compared with domestic and national investment, the legal advisors of foreign investors discuss legal environment and compare and evaluate it and then offer report for prioritizing investments in a country. Majorly, they are considered non-commercial laws before investment (Hoseinizadeh & Rostamzadeh, 2015), because foreign merchant shall involve with non-commerce laws in order to perform all affairs and take legal breadth with them (Rostamzadeh & Anabi, 2012), thus, it is natural that it is so important to discuss legal chapter more and investigate it with infra-national strategy which is regarded as necessity, unfortunately, new commercial law approved 2011 which ratified currently did not point to it and its realization should be discussed and one of the legal gaps of new commerce approved 2011 is that it needs perfect discussion and the subject needs separate research and discussion. But main subject is to discuss comparative discussion of merchant and investor from the perspective of both law of types economics, and commerce related (foreign investment law approved 2002 of Iran and new draft trade law of Iran approved 2011) from the perspective of both law of types economics, and commerce related because today is the science of comparative law for synergies and identify to the useful cases and the elimination of weaknesses and legal gap (Jalali, 2010) and it will respond that what are differences and similarities between Iran' new commerce law and foreign commerce law about merchant? And the hypothesis is that commerce law approved 2011 doesn't consider it and so the legal definition of merchant and investment from the perspective of two law is identical, which it seems that this improper and undesirable, since any law has enacted for own unique reason.

Thus, in this article, it is tried to discuss new draft trade law of Iran approved 2011 about foreign investor and merchant against foreign investment law approved 2002 of Iran, should be investigated.

Today the creation of a secure environment and providing peace of mind and legal certainty merchant, not only considered of human rights issues (Rostamzadeh & Hashempoor, 2014), but also, they are regarded as development stimulator and this variation is necessary in legal discussion of commerce.

2. Merchant and Investor from Domestic Commerce Point and New Commerce Law Approved 2011

The merchant means businessman or someone who do performs business and sale or purchase something (Amid, 2005). Necessity of commerce is to repeat commercial transactions. Scale of repetition of commercial transactions which include commerce law is depended to custom and cannot limited and it shall be saw that does the volume and scale of commercial transactions cause to regarded merchant or not so there is no specific criterion (Sutodeh Tehran, 2009). Of course, it shall be pointed that if someone is be tourist and performing in car exhibition and his main income is it, but do perform transaction repeatedly, is included commerce in terms of Iran's law (Hasni, 2001) and the foreign tourists do perform transaction in Iran or another country are regarded as merchant.

In legal systems of countries like French, Belgium, Germany, it is written that merchant is recognized in terms of economic activity or registration on guild bureau and all actions due to merchant are regarded in terms of commercial actions. Therefore, by consideration terms, non-commerce person can do perform commercial

actions and commerce laws are considered in terms of contracts between merchants. But, the personal concept was being criticized due to principle equality of citizens against the law and commercial needs and instead of concept the commerce legal subject was considered law maker, this legal approach is reflected in first article of Iran and French commerce law.

Based on first article of Iran law, the merchant is someone who does perform commercial actions. In this definition, the law maker followed concept the commerce legal subject that mean commerce law is sum of commercial actions not laws of merchant and someone who does perform commercial actions considered as merchant.

In personal point of view, contrary, commercial actions are the affairs which are done by merchant in order to use for own business (article 343 of Commerce law, Germany).

In this concept, the merchant is someone who registered his name in special bureau (for example, commercial registration bureau). Separation between two concepts were not as implicit in court and by studying some of new laws, we can appear its symbols.

In new commerce law, the merchant is not someone who has normal job to be trade deals, but must determine his job according to one of the clauses of article 1 new commerce law approved 2011, and it is broader than article 2 of the present law commerce and in article 91 new commerce law approved 2011, such as article 6 of the current commerce law the law maker has maintained same previous terms but in new commerce law approved 2011, the partial merchants are regarded as merchant and their actions are regarded as legal terms to be merchant and they must have commercial bureau which is not exception unlike the current commerce law (Same, 378).

It is important to identify commercial and merchant actions and we can point to some of them, including native or professional commercial actions which identify merchant and the said actions are repeated by merchant or the actions are done by merchant or non-merchant, thus they are regarded as commercial actions. Of course, such definition conforms to subject concept of the Law commerce commercial practices subordinated by merchant for your business need or because it is done (Erfani, 2010).

If a person was considered a legal standpoint merchant all actions in his life such as civil actions will describe the commercial rights (Skini, 2004). Of course, merchant's transactions with together Non-commercial transactions are not regarded as commercial actions (Hatami, Garaee, & Dmrchyly, 2005), at sum, it can be claimed that in new world, different relations between people exited from limitation of personal region and customized to all. Cheque, drafts, promissory notes and so on are pertinent to interventions of government pertain to economic laws. Given these developments basically people's private lives has very closed relationship with commerce, commercial Law lost Professional property and own job, slowly and becomes to law governing the commercial practice or commercial transactions. It is seen in the new commerce law approved 2011.

3. Merchant and Investor from Commerce Laws and Foreign Investment

The states in which commercial court separates from civil ones, merchant identification is essential to determine the competent court, it is useful to know the subordinated commercial practices (Safari, 1964). Article 1 of French law refer: the merchants are persons who do perform commercial actions and use them as their normal occupation, meanwhile, article 2 of current Iran law and article 622 of French commercial practices are recognized and mentioned but however, in some cases, the law and judicial procedural of Iran has accepted personal concept commercial law.

The law maker recited new draft in commerce law by citation main transactions (Ressayee Neyra, 1994) which exist in current article 2 Commercial Law, they have similar and equal strategy and by deleting article 1, point to definition of foreign investor and merchant and the law approved 2002 says: real or legal identities as Iranian and non-Iranian nationality who obtain investment permission article 6 shall be regarded as merchant (law and regulations on encouraging and protecting foreign investment, 2002). The most prominent point is that based on above article, an Iranian identity can be merchant and uses its advantages but shall do situations this Iranian person? The first discussion is about origin of capital of investor shall be foreigner. Article 1 of law for encouraging and protect Iranian investment follow international patterns. From its regard, foreign investment means to apply foreign investment in new economic firm after obtaining investment permission (Dehdar, 2006). The most important point is that non-Iranian source financial plays vital role and not nationality of investor, even Iranian company which its source capital is not Iran considered as foreign investment. Thus, foreign capital means cash or non-cash revenue which has been entered by foreign investor and necessarily, it shall be non-Iranian origin to include on advantages and facilities foreign investment law of Iran. The definition of foreign capital and foreign investment from law makers perspective is very board. In the definition of "foreign

investor”, the difference between Iranians and non-Iranians cannot be seen in law, this is unlike the previous law (enacted in 1954) and it was not referred to possibility of Iranian investor domiciled abroad but definition offered in article 1 includes facilities law to Iranian investors domiciled abroad and in new law, foreign investor is someone who (weather Iranian or not) entering his capital into Iran the origin of the foreign financial and perform in economic sections. The only condition in this field article 5 of the law on foreign investment regulations is the situations which stipulated which cited that: real and legal persons in Iran in order to be considered a foreign investor must provide legal documentation of economic activity and merchant in the out country in this situation must refer to the commercial law to determine be regarded as merchant and its conditions which shall be investigated next. In most countries, foreign investment laws are merely for foreigners and considered foreign citizenship as a term of to be foreign investors.

Paragraph J of article 1 of law dated 11 August 1993 of Saudi Arabia cited that foreign investor is someone who is the person foreign national or the company that all its shareholders are foreigners (Piran, 2010). Thus, it is foreign origin to regard foreign investor without limited domicile and can provide more complexities so that it is so difficult to find foreign origin and each Iranian can exit his capital to abroad and after some moments, returned it with Iranian origin although, it has much advantages in present law. Of course, the law cites reasons for economic and commercial activities in the out country in article 5 and in this step, the scale for economic activity is to evaluate of it new commercial law approved 2011. But it seems that the subject cannot solve the problem, because, firstly, it was not difficult to establish one company in the out country and secondly, this term plays limited role so that many Iranian save much money by performing different methods or professions which there are not documents about it to regard as foreign capital in terms of article 1 of new commerce law approved 2011, it was worthy that the law maker considers the residence term of in the outside the country in this legal article. His attitude to the lack of difference between Iranian and non-Iranian foreign investor is one of the highlights and important foreign investment law.

Which this important point not observed in the law other countries such as relevant law and same neighboring country (Turkey) (Rostamzadeh, 2012).

Law maker for prevent of abuse of matter special article Iranian nationals has predicted in article 5 executive regulations for Foreign Investment.

At the end of this article referring to documentation and documents that is confirmed and license economic and commercial activities the applicant is outside the country which can be investigated from different aspects first of this submitted documents must what be properties? And what official documents be included such as commercial offices or ... and unofficial, as well as sense of this article: foreigner investor and non-Iranian does not need to be under commercial law of Iran or their country (businessmen) regarded as merchant from a legal standpoint because of this article is for Iranian who wants to invest in the form of foreign investment. Another point is that whether means of law maker is the Iranian nationals which origin of capital and his commerce. In the form of foreign capital that investing in Iran according to the definition of the commercial law of country where achieved its capital must be regarded as merchant. Or the criterion of the law will be the same definition of article 1 or not at all to be merchant is meant intended new bill commerce law or was not considered the other country and merely any activity which can be outside the country on behalf Iranian nationals money earned and invest in Iran. In this form can be considered him as merchant? And using from the benefits of predicted in law. Regulations of this law separately to the foreign investor and non-Iranian to be not referred at all and merely has been codification for Iranians. So based on the concept of this article, it seems non-Iranian nationals for considered as foreign investor from perspective of Iran law does not need to consider as merchant and businessmen from view of no law even new bill commerce law and merely just with entering own foreign capital to Iran from perspective of law maker considered investor. and commerce in formats, forms and different subjects in the Iran Commerce law (which in the new bill Commerce law is to be stipulated more very broad and general). Commercial practices do not need, but activity. In the form in which foreign investment law approved for necessary of purpose this law and it is more general. As foreign investor is considered and law for the Iranians which based article 1 have capital with foreign origin and identify them as foreign investor benefits and incentives has granted to them. There is a term in article 5 of regulation which seems merchant character should be, in accordance with article 1 bill however, the question that arises here is that is the criterion base on new bill? Or law of the country which capital has been achieved there? It seems according to the criterion of unity that exists in the country's commerce law this criteria is the same in generalities. There is no significant difference together, another point is that the law maker wants to discriminate Iranian investor who invests in the form of foreign capital and based on definition of it, it shall confirm to merchant principles. The generalities of the main principles show that because of economic situations, it can be conferred that they are located on the form of law

and it is regarded as investor. It seems that the terms of to being merchant can be reached by the capital and it seems that is there new draft for it and it seems that as for scale which is derived from legal and economic view, there is legal gap in commerce law which is regarded as another aspect. For example, in paragraph 8 of article 1 of commerce law, there are many problems. And in section 14 which is pertinent to information technology, there are limitations which are seen in paragraph D of article 2 of entourage and protect law in goods and law making services the commerce law approved 2011 and investment law, there are differences and points which can be made problems in internal investment. But in case of the difference certainly the criterion considered law maker is new draft trade law of Iran approved 2011 why so approved documentation referred to in law must have legal concept and supporting in terms of Iran law. Although this article from legal and economic standpoint is gap of draft trade law 2011 and even the current commerce law. According to new bill merchant is someone who has for himself employment to any of trade acts which expressed in Article and may be commerce law introduce someone as merchant and is permissible actions for his employment base on law but be limited from perspective of foreign investment law due to observe the condition of national interest and at the time of utilization of the facilities profits or at any other stage created problems for example paragraph 8 of article 1 of the new draft law on commerce. And its sub-sectors paragraph topic setting up news agencies or under section 14 title related to information technology and provide national domain in action for foreign investment and subject to its there are many restrictions and may even be prohibited or in paragraph (d) of article 2 foreign investment law approved 2002 in topic production of goods and services law maker according to the national interests and its conservation (especially when doing them by persons who has foreign citizenship or two nationalities Iranian) has placed percent and limitations which it was not raised in domestic trade law. But in related cases two laws “foreign investment law approved 2002 of Iran” and “new draft trade law of Iran approved 2011” the effects and differences and points which has foreign investment relative to domestic investment can be caused contradictions and problems.

4. Conclusion

Today, commerce discussion is regarded as basic step of development of different countries and the law dominant on it is used in order to utilize the law and it is cited that foreign commerce and foreign investment is regarded as one of the most important commerce discussion in infra-national domain and today, the said subjects will be attracted by the law makers and they approved foreign investment which are necessary actions, in this regard, merchant and investor are seen as one of the similar significance (it is necessary to say that in terms of law for attraction of foreign investor, there are simulations from advantages and facilities).

Today, the countries plan systematic and targeted systems for developing businesses and the aim of law maker is to collect foreign investment in any tool and form and today, one of the main solutions in order to it, is to attract foreign investment and at same time, the law maker try to attract different investments and don't forget it, so that it is so valuable from foreign investment, foreign capital citizens into the country in comparison with capitals foreign investment are more enduring and stable and realization attracting the foreign investment is the main task of law (Rostamzadeh, Nekkhah, & Reza Zadeh, 2012). And thus, Iranian citizenship was not merchant in terms of new commerce law approved 2011. When “because of not considered as merchant from the perspective of the new draft trade law of Iran 2011 and lack of features contained in the law as merchant and because of not having the legal conditions” is not considered foreign investor, this criticism was notable and should be modified as noted earlier, as for necessity of attraction Iranian and Non-Iranian merchant by investment with foreign origin, and given the importance of attracting inward investment by the foreign financial resources compared with foreign investors. It is necessary to be considered seriously criticism new draft trade law of Iran approved 2011 as new law which fundamentally should have dynamic and reliability property based on the needs of modern business and international trade, lack of explicitly pointing to legal gap about legal discrimination between foreign investor and Iranian investor qualified is in the form of foreign investor which in these conditions Iranian investor must be have legal description merchant in discriminatory approach that it is between an Iranian and foreign investor in terms of providing documentation from Iranian and this legal description must be evaluated from a legal standpoint by new draft trade law of Iran approved 2011, to benefit from Iran's foreign trade facilitation and the way of law enforcement is contrary to the manner of foreign investment and this is the other ambiguity cases law which is discriminate with foreign investment low and needs restoration.

Identified proposed of this study predicting the position of foreign investment, the definition of investor and specify legal clear in the case of interference and referring to each other two law of discussion subject are in “new draft trade law of Iran approved 2011”, especially that Iranian law with broad approach Iranian nationals who basically, is coverage commerce law with a specific legal conditions is considered as foreign investor.

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Learning Processes and Academic Achievement among Omani School Students

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Abstract

This study examined the competing role of cognitive and affective learning processes used by students on predicting their academic achievement. The sample included 342 students from different schools in Oman (female=74.6%). The participants responded to a group of measures as part of a national study examining different learning variables. For the purpose of the current study, the participants' data of six measures (i.e., critical thinking strategies, organizational strategies, memory strategies, intrinsic motivation, extrinsic motivation, and anxiety) were obtained. In addition, the students' grade average point (GPA) using their reported grades were also used. The findings showed that out of the affective model, anxiety level and intrinsic motivation were significant predictors of students' academic achievement. However, critical thinking was the only predictor of academic achievement from the cognitive model.

Keywords: learning process, academic achievement, Omani students

1. Introduction

Apparently, one of students' concerns is how well they can do in school. Achievement is a crucial part of students' academic life and its development should be a primary goal in any school's plan. Academic achievement contributes to the way students form their self-concept (e.g., Marsh, 2004; Pinxten, Fraine, Damme, & D'Haenens, 2013; Retelsdorf, Köller, & Möller, 2014). Also, researchers have found significant relationships between academic achievement and different motivational constructs which may contribute to subsequent accomplishments (e.g., Roskam & Nils, 2007; Ju, Zhang, & Katsiyannis, 2012). A variety of factors can affect academic achievement. This paper focuses on two major types of factors which are cognitive and affective factors. Examples of cognitive factors include intelligence or cognitive ability (e.g., Beaujean et al., 2011; Steinmayr & Spinath, 2009), cognitive styles (e.g., field-dependent vs. field independent and convergent vs. divergent thinkers) (Danili & Reid, 2006), and cognitive processes (e.g., memorization, critical thinking and organization) (e.g., Mall-Amiri & Sheikhy, 2014; Mouziraji & Mouziraji, 2015; Oxford, 1990). On the other hand, examples of affective factors include motivation (e.g., Steinmayr & Spinath, 2009), attitude (e.g., Singh, Granville, & Dika, 2002), self-concept and self-efficacy (e.g., Berg & Coetzee, 2014; Levpušćek & Zupancić, 2009; Matovu, 2014).

Students simultaneously utilize both cognitive processes and affective variables to facilitate their learning. Thus, this research paper attempts to investigate the competing role of these two types of factors (i.e., cognitive processes and affective variables) on predicting students' academic achievement.

1.1 Cognitive Processes and Affective Variables: Definition and Importance

Learners' manipulation of both cognitive processes and affective variables is essential for learning development as each set has its distinctive properties and advantages to learning. Cognitive processes are used for understanding and producing learning outcomes; it is a "whole-brain" approach of solving problems (Oxford, 1990; Strang, 2014). Examples of cognitive processes are memorization, critical thinking, organization and elaboration (e.g., Yusri, Rahimi, Shah, & Wah, 2013; Zusho, Pintrich, & Coppola, 2003). On the other hand, affective variables are a way of regulating emotions while learning (Oxford, 1990). Students are able to learn how to control their emotions such as motivation or anxiety to manage developing their performance (Garcia &

Pintrich as cited in Ting & Chao, 2013). Some examples of affective variables are motivation, anxiety, self-efficacy and self-concept (e.g., Deci & Ryan, 2008; Lynch, 2006; Singh, Granville, & Dika, 2002).

Using cognitive process and affective variables has many advantages on learning process. Some of these processes allow students to become more self-directed and autonomous learners (Lee, 2010; Oxford, 1990). Furthermore, research has shown that there is a positive relationship between the frequency of using cognitive processes and affective variables and the level of competence in different academic areas (Ansarin, Zohrabi, & Zeynali, 2012; Ghafournia, 2014; Oxford, 1990; Ting & Chao, 2013). Moreover, cumulative research has found positive impacts of cognitive processes and affective variables on academic achievement (e.g., Ghafournia, 2014; Strang, 2014; Ting & Chao, 2013).

1.2 Affective Versus Cognitive Factors and Effects on Academic Achievement

Since the past two centuries, affective and cognitive aspects of learning have attracted much attention that led to the construction of different psychological theories and educational framework. One example of these theories is Self-Determination Theory (SDT) that dates back to the mid of 1980s (Deci & Ryan, as cited in Rayan & Deci, 2000). This theory exemplifies the “affective part of learning” focusing on different types of motivation such as controlled motivation and autonomous motivation as well as the effect of motivation on wellbeing and performance (Deci & Ryan, 2008). A second example is Self-Regulatory Learning (SRL) approach that represents both affective and cognitive models of learning. It concerns one’s ability to “self-monitoring” behaviors, thoughts, motivation and feelings in order to achieve a goal, either an academic or a socioemotional goal (Pintrich, 2004; Santrock, 2009). Learners are assumed to go through four main phases accompanying different strategies in each phase which are planning, monitoring, control and regulation (Pintrich, 2004). A third example is Oxford’s model (1990) of learning strategies which also carefully attends to the cognitive and affective aspects of a learning process. Oxford’s model encompasses six main types of learning strategies: memory, cognitive, compensation, social, affective and metacognitive strategies.

Cumulative research has studied the effect of affective variables on academic achievement. For example, Singh, Granville and Dika (2002) showed that math and science motivation and attitude significantly affect math and science achievement. Other researchers have also proved the positive contribution of motivation on academic achievement of different school subjects (e.g., Bipp & Dam, 2014; Froiland & Oros, 2014; Hayenga & Corpus, 2010). Moreover, various motivational constructs, such as self-concept, self-efficacy beliefs, anxiety, value and attitude have been found to affect academic achievement (e.g., Mahyuddin et al., 2006; Seaton, Parker, Marsh, Craven, & Yeung, 2014; Steinmayr & Spinath, 2009; Wolters, Denton, York, & Frances, 2014).

Similar to affective variables, the use of cognitive processes in learning was also found to influence academic achievement. The motion of cognitive psychology that stresses the importance of cognition and memory on learning has started several years ago (e.g., Little, Das, Carlson, & Yachimowicz, 1993; Shiffrin & Steyvers, 1997). Recently, research on cognitive processing have investigated the relationship between some cognitive processes, such as memorization, rehearsal, elaboration, organization, and critical thinking, and different academic outcomes including achievement (e.g., Aldhafri, Alkharusi, & Al Ismaili, 2015; Areepattamannil & Caleon, 2013; Areepattamannil, 2014a; Mall-Amiri & Sheikhy, 2014; Strang, 2014).

1.3 The Current Study

The current study contributes to the literature by comparing the competing effects of three cognitive processes (memorization, organization and critical thinking) and three affective variables (extrinsic motivation, intrinsic motivation, and anxiety) on predicting Omani students’ academic achievement, as well as, examining the differences within these two sets of factors. The following paragraphs demonstrate a detailed description of each process and variable and its effects on academic achievement.

Memory is defined as “the retention of information over time which involves encoding, storage and retrieval” (Santrock, 2009, p. 277). Memorization techniques include creating mental links, making associations and reviewing (Oxford, 1990). Since a long time ago, memorization has been recognized as an easy, a traditional and a reliable technique of learning that most learners depend on. For example, in mathematics, students typically tend to memorize the multiplication table to use it in further calculation processes. Researchers supported the effectiveness of memorizing multiplication table in academic performance (e.g., Djemil, 2010). Also, many researchers advocate the use of memorization in learning a foreign language (e.g., Chu, Huang, Shih, & Tsai, 2012; Yu, 2010). However, by the beginning of 20th century, some critiques have stood against memorization by discovering its drawbacks as a strategy of learning. Therefore, recently, memorization is recognized to have a double-edged effects since both negative (e.g., Areepattamannil & Caleon, 2013; Areepattamannil, 2014a) and positive (e.g., Oxford, 1990; Mouziraji & Mouziraji, 2015; Ygzaw & Fentie, 2013) impacts of memorization on

academic achievement have been documented in the literature. Thus, it is essential that learners do not depend solely on memorization while learning. Areepattamannil (2014a) contended that learners should have adequate “declarative knowledge” as well as “procedural” and “conditional” knowledge.

Organization is pertaining to learning techniques such as grouping, outlining, concept mapping and differentiating ideas (Keng, 1996; Lynch, 2006). Ygzaw and Fentie (2013) suggested that learners who cognitively use organization techniques in their learning are more likely to score higher in reading tests. Organization techniques differ in their usage and influence on learning. For instance, Keng (1996) found that students who used concept mapping scored higher on their written test than those who used outlining and note-taking. The author concluded that using concept mapping as a learning strategy can contribute in making meaningful learning. Other researchers found positive influences of organizational techniques while lectures’ note-taking such as illustrative diagrams and outlines on post-test performance (Bui & McDaniel, 2015).

Critical thinking assists learners to ameliorate problems or make essential evaluations by using their prior knowledge (Lynch, 2006). Learners should be encouraged to be critical thinkers while learning through searching for meaning, struggling with ideas and using logic in arguments (Karbalaei, 2012). Fahim, Barjesteh and Vaseghi (2012) suggested that critical thinking activities used in the classroom can help students “stay with” or “go beyond” the presented information. Hohmann and Grillo (2014) designed a critical thinking rubric program to evaluate and strengthen students’ use of critical thinking skills. The researchers found that the repeated use of these rubrics with the students contributed to increasing course grades. Likewise, the positive effects of critical thinking on academic achievement have been shown by researchers (e.g., Afshar & Movassagh, 2014; Alrubaei, 2009; Ayub, 2014; Mall-Amiri & Sheikhy, 2014; Stewart, 2000).

One of the affective variables that gained popularity among scholars and educators and was proved to significantly affect academic achievement is motivation. The self-determination theory has differentiated between different types of motivation. Based on Deci and Ryan (2008), motivation basically can be divided into autonomous and controlled motivation. Autonomous motivation consists of intrinsic motivation and a sort of extrinsic motivation in which people perceive the task’s value and “ideally” integrate it in their “sense of self”. On the other hand, controlled motivation involves external regulation, in which one’s action is the result of rewards and punishment, and introjected motivation, in which motivation is “partially internalized” and empowered by factors such as self-esteem, approval, or avoiding shame. In this study, the focus is on two clearly defined types of motivations: intrinsic and extrinsic motivation. Simply, intrinsic motivation is about doing something for its own sake; while extrinsic motivation entails doing something to gain something else (Santrock, 2009). Intrinsically motivated students believe on the value of learning for seeking knowledge, whereas, extrinsically motivated learners seek learning to attain external goals such as gaining grades or pleasing others (Lynch, 2006). Motivation can influence students’ engagement inside the classroom since learners with high motivation may feel bored if the learning process is very slow and low-motivated learners may face difficulties to cope with fast learning process (Yusri et al., 2013). It was found that intrinsic motivation pushes learners towards using multiple learning resources and higher order learning strategies (Yusri et al., 2013). Also, intrinsic motivation, but not extrinsic motivation, was reported to significantly predict course grades of students (e.g., Areepattamannil, 2014b; Lepper, Corpus, & Iyengar, 2005; Lynch, 2006).

Another affective variables that can crucially affect learning, generally, and academic achievement, particularly, is anxiety. Anxiety is “the worry that the students may experience” in a specific task, a subject or a test (Wolters et al., 2014, p. 505). Anxious students could be less likely to perform well at school. Anxiety was found negatively correlated with students’ expectations of success (Virtanen, Nevgi, & Niemi, 2015). Moreover, Sideridis (2008) found that mastery avoidance goal orientation was associated with anxiety. Many other researchers have pinpointed to the negative impact that anxiety leaves on students’ academic achievement (e.g., Puteh & Khalin, 2016; Rana & Mahmood, 2010; Singh & Thukral, 2009; Zusho et al., 2003).

While some studies have examined the effect of affective variables and cognitive processes on academic achievement separately (e.g., Areepattamannil & Caleon, 2013; Mahyuddin et al., 2006; Steinmayr & Spinath, 2009; Strang, 2014), there are only few studies that investigated the competing effects of both cognitive and affective aspects of learning. One example of those studies is Ygzaw and Fentie (2013) who found that unlike motivational beliefs and metacognitive processes, cognitive processes (rehearsal, elaboration, and organization) used by the students were the only significant predictors of reading performance. Consistently, similar results were reported by other researchers (e.g., Gagne´ & Pe`re, 2001). In contrast, Zusho et al. (2003) found that motivational constructs of task value and self-efficacy beliefs were better predictors of final performance than cognitive processes. Other researchers have also supported the surpassing role of motivational constructs over some information processing or cognitive processes (e.g., Albaili, 1997). However, Spinath, Harlaar and Plomin

(2006) indicated that general mental ability (i.e., cognitive factors) was the only predictor of academic achievement in science; but, ability self-perception and intrinsic value (i.e., affective factor) were the strongest predictors, beyond general mental ability, in mathematics and English.

Whereas those studies examined the competing effects of cognitive processes versus affective variables, some studies have looked at the various effects on achievement within each set of variables. To illustrate, affective variables (i.e., extrinsic motivation, intrinsic motivation, anxiety) and cognitive processes (memorization, critical thinking, organization) may differently influence academic achievement when differences within each model are examined. Despite the lack of research, to the researchers' knowledge, that focused on this scope, some few studies were documented in the literature. For example, with regard to affective variables, Lynch (2006) found that unlike extrinsic motivation, intrinsic motivation was associated with course grades. In addition, according to Hayenga and Corpus (2010), students who have low-extrinsic motivation coupled with high intrinsic motivation got higher grades than students in two other clusters (i.e., students with low levels of both extrinsic and intrinsic motivation, and students with high levels of both extrinsic and intrinsic motivation). Despite the high quantity the students had of both types of motivations, it is considered as a poor quality motivation. Thus, the "ratio of intrinsic to extrinsic motivation" is a stronger predictor of academic achievement than the amount of motivation the students have. However, the researchers couldn't find any study that compared between the role of motivation in contrast to anxiety (as two affective factors) in predicting academic achievement.

Regarding cognitive processes, although many studies have examined the frequencies of each type of processes used by students (e.g., Ghafournia, 2014; Riazi & Rahimi, 2005; Srisupha, 2012), very few research, according to the researchers' knowledge, compared how each process differs in its effects on achievement or which process is a stronger predictor of achievement.

Another important area of research is the examination of cross-cultural differences according to which the role of cognitive processes and affective variables on academic achievement varies. For example, Areepattamannil and Caleon (2013) examined the relationship between two cognitive processes, memorization and elaboration, and mathematics achievement across four East Asian educational systems: Singapore, Korea, Shanghai-China and Hong Kong-China. The findings presented that memorization was negatively associated with academic achievement in all educational systems. However, elaboration processes were not associated with mathematics achievement in Shanghai-China and Korea; and they were negatively linked to mathematics achievement in Hong Kong-China and Singapore. Similar results were found by the same researcher, Areepattamannil (2014a), in which students' self-reported use of memorization and elaboration demonstrated various relationships (i.e., positive, negative or no relationship) on students' course grades across two Indian states: Tamil Nadu and Himachal Pradesh.

In brief, this study will add to the literature by examining not only the competing role of cognitive processes versus affective variables, but also it examines the competing role of each process/variable within each set of factors (cognitive and affective). In addition to the lack of studies conducted to examine these two areas of interest, little research, if any, has been done in the Omani context to compare the predictive role of cognitive processes and affective variables in predicting students' academic achievement. Therefore, this study examines Omani students' perceptions of their usage of cognitive processes (i.e., memorization, organization and critical thinking) and affective variables (i.e., extrinsic and intrinsic motivation, and anxiety) and their prediction role of academic achievement.

2. Methodology

2.1 The Sample

The sample of the current study consisted of 342 students from different school districts in the Sultanate of Oman. Female students represented 74.6% of the total sample. Students were in grades 5 to 11 of public schools and their ages ranged from 10 to 19 ($M=14.22$, $SD=1.73$). Students' grade average point (GPA) ranged from 50 to 95 ($M=75.87$, $SD=14.04$). The students came from families where 75% of mothers and 56.5% of fathers having less than secondary school certificate. The participants responded to the questionnaires during class session. Permission to collect data was obtained from the districts' administrations and then from schools' administrations. Students were assured confidentiality and they were granted the option to participate in the study or not. All students attended classes during data collection chose to participate.

2.2 Measures

The participants responded to a group of existing measures as a part of a national study examining different learning variables. For the use of the current study, the participants' data in six measures were reported in

addition to their grade average point (GPA) using their reported grade. The first measures examined students' use of critical thinking strategies and consisted of 4 items ($\alpha=0.48$). The second measure consisted of 5 items and examined students' organizational strategies ($\alpha=0.46$). The third measure dealt with students' use of memorization strategies and included 6 items ($\alpha=0.48$). For the affective model, the participants responded to three questionnaires examining their levels of intrinsic motivation (5 items, $\alpha=0.53$), extrinsic motivation (6 items, $\alpha=0.45$), and anxiety levels (5 items, $\alpha=0.58$). All measures used a 5-point Likert scale that ranged from strongly agree (5) to strongly disagree (1). More validity and reliability indicators for the measures when used with Omani students are reported somewhere else (Aldhafri et al., 2015; Aldhafri et al., 2012).

3. Results

Data were screened for outliers and no threats were identified. Descriptive analyses of the main variables of the study showed that the participants have high levels of using the affective variables (i.e., intrinsic motivation, extrinsic motivation, anxiety) and high levels of using the cognitive variables (i.e., memorization, organization, critical thinking). The participants also showed high mean score of GPA.

To examine the predictive role of the two competing models in predicting students' academic achievement, two separate regression models were used. In the first model of predicting students' academic achievement, the affective variables (i.e., intrinsic motivation, extrinsic motivation, anxiety) were used as predictors. In the second model, the cognitive variables (i.e., memorization, organization, critical thinking) were used to predict students' academic achievement.

As it can be seen in Table 1, the results of the first regression model show that two affective variables were significant predictors of students' academic achievement. The model indicates that students' intrinsic motivation ($t=2.14$, $p<0.05$) and their anxiety level ($t=-3.79$, $p<0.001$) significantly predicted their academic achievement. This affective model, however, explained only 5.4% of variance in the independent variable, students' academic achievement.

Table 1. Results of the multiple regression models to predict students' academic achievement

Model	<i>B</i>	<i>S.E</i>	β	<i>t</i>	<i>sig</i>	<i>R</i> ²
Affective Model						
Constant	94.56	7.54		12.45	0.000	
Test Anxiety	-7.64	2.01	-0.02	-3.79	0.000	
Extrinsic Motivation	-2.89	2.33	-0.07	-1.24	0.215	0.054
Intrinsic Motivation	4.34	2.02	0.13	2.14	0.032	
Affective Model						
Constant	104.83	6.76		15.49	0.00	
Organization	1.84	1.78	0.06	1.03	0.30	
Memorization	2.90	1.91	0.09	1.51	0.13	0.073
Critical Thinking	8.17	2.06	0.24	3.96	0.00	
Affective & Cognitive Models						
Constant	104.45	7.71		13.54	0.000	
Test Anxiety	-4.61	2.16	-0.13	-2.13	0.033	
Extrinsic Motivation	-1.11	2.34	-0.03	-0.47	0.636	
Intrinsic Motivation	6.51	2.12	0.20	3.06	0.002	
Organization	1.29	1.93	0.04	0.67	0.503	
Memorization	3.76	1.93	0.12	1.94	0.053	0.110
Critical Thinking	7.74	2.18	0.22	3.54	0.000	

In the second regression model, the results show that only one cognitive variable significantly predicted students' academic achievement. The model demonstrates that students' critical thinking was the only predictor of their academic achievement ($t=3.96$, $p<0.001$). This cognitive model explained 7.3% of variance in students' academic achievement.

The results from the second regression model show that the cognitive model is stronger than the affective model in predicting students' academic achievement. However, the two models together (see Model 3 in Table 1) explained only 11% of variance in students' academic achievement.

4. Discussion

The current study aimed to examine the possible relationship between a group of affective and cognitive variables and students' academic achievement. Specifically, the researchers investigated the competing effects of the affective model compared to the cognitive model in predicting the levels of students' academic achievement using underrepresented sample of Arab students from the Sultanate of Oman.

The results presented that only some cognitive and some affective variables were significant predictors of students' academic achievement. Within the affective model, students' intrinsic motivation and their anxiety levels, but not their extrinsic motivation, were significant predictors of their academic achievement. This supports the importance of promoting students' intrinsic motivation as a significant factor affecting students' academic achievement. Model learning theories such as self-determination emphasizes the core role of intrinsic motivation in influencing students' learning (e.g., Deci & Ryan, 2008). As supported by previous studies, intrinsic motivation can predict course grades (e.g., Lepper et al., 2005; Lynch, 2006); also, it pushes students' toward using higher order learning resources and strategies (Yusri et al., 2013). In addition, the results show that it is important to control the levels of students' anxiety and work to minimize it as much as possible considering its negative effects on students' academic achievement. The findings of the current study suggested that students' anxiety level is a possible threat to their academic achievement. Past research stresses that high level of anxiety is most likely to undermine their ability to achieve well in their schoolwork (Puteh & Khalin, 2016; Rana & Mahmood, 2010; Singh & Thukral, 2009). The effects of this affective model were limited looking at the percentage of variance in students' academic achievement accounted for by this model. In addition, the results show that extrinsic motivation was not a significant predictor of students' academic achievement in the presence of the other two affective variables (i.e., intrinsic motivation and anxiety level). This result is consistent with other studies which found that extrinsic motivation is less effective on students' achievement compared with intrinsic motivation (e.g., Aarepattamanni, 2014b; Lemos & Verissimo, 2014; Lin, McKeachie, & Kim, 2003).

The cognitive model was a significant predictor of students' academic achievement. The effect of this model, however, was limited to the significant effect of students' critical thinking on their academic achievement. The other two cognitive variables were not significant predictors (i.e., organization and memorization) when examined along with students' critical thinking. Recent research of critical thinking shows the importance of training students to develop different critical thinking strategies considering the cumulative evidence of their positive effects on increasing students' academic achievement (e.g., Afshar & Movassagh, 2014; Alrubaei, 2009; Ayub, 2014; Mall-Amiri & Sheikhy, 2014; Stewart, 2000). The cognitive model, however, did not explain large percentage of variance in students' academic achievement.

The results of the current study suggest that there are other important variables that may influence students' academic achievement. When the two models were examined together in the same regression model (see Model 3 in Table 1), the two models only explained 11% of variance in students' academic achievement. Future research may examine other important variables within the Omani school context such as students' self-efficacy beliefs (Aldhafri, 2016) and social goals (King, McInerney, & Watkins, 2012, 2013; King & Watkins, 2012) as self-related variables or classroom climate and students' perceptions of parenting styles as context-related variables.

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A Study on the Efficiency in the Children Suffering from Attention Deficit Hyperactivity Disorder

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Abstract

The present study aims at investigating the efficiency of the children suffering from hyperactivity disorder in the continuous function test of auditory and visual stimuli (IVA) in order to improve and promote the mental health of these kinds of people. This is of descriptive-comparative type of study. The 30 participants of the present study are the students of Tehran schools which have been chosen through cluster sampling among two groups of hyperactive and normal boys and girls who aged from 12 to 18. The Connors questionnaires and IVA+AE test were used to achieve the goal. The data were analyzed using SPSS-20 and multivariable statistical analyses method. The findings showed that there is a significant correlation among the focused attention, attention distraction, divided attention and selective attention of auditory aspect of normal and hyperactive students and the scores of the focused attention, attention distraction, divided attention and selective attention of the auditory aspect of normal students are higher than the hyperactive students ($P < 0.05$). Furthermore, the same correlation exists in the visual aspect of the normal and hyperactive students and the scores of the focused attention, attention distraction, divided attention and selective attention of the visual aspect of normal students are higher than the hyperactive students ($P < 0.05$).

Keywords: attention deficit hyperactivity disorder, continuous function of auditory, visual stimuli

1. Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most important psychiatric disorders of children and teenagers. Diagnostic and statistical guide of mental disorders (DSM-V) declares that the main feature of attention deficit-hyperactivity disorder-the stable pattern of attention deficit and hyperactivity- is impulsivity which compared with other people at the same age is more frequent and intense. Attention Deficit-Hyperactivity Disorder (ADHD) shows the stable pattern of attention deficit and hyperactivity (Stoner, 2003) and impulsive behaviors (Owens & Kozier, 2007) which are more intense than normal children are at the same age. There are three main categories for this disorder: inattention, impulsion, mixed (inattention and impulsion). These symptoms should be chronic and must have been seen at least twice before the age of 12. Among the troubles which can be made for the parents and the society by these people are the following: these people usually interrupt others and interfere with the affairs, they talk a lot. The scientists believe that the main problem of these people is the sustained attention (Bussing, Mason, Bell, Porter, & Garvan, 2010). Besides, other problems that can be made by these people are improper relation with the parents, distraction and unfocused attention which leads to dull learning and the other trouble is their impulsiveness which results in making mistakes due to inattention to the details while writing. There is also an inverse relation between hyperactivity and the harmony of the movements. The children who show hyperactivity symptoms would need clinical assistance in teenage period and they cannot control themselves when they are adults. Most of them show aggression, behavioral disorder and compulsory obsession when they grow up (Owens & Kozier, 2007).

Currently, the researches show the continuity of Attention Deficit Hyperactivity Disorder (ADHD) changes differently from 45%-55% (Gaya & Chung, 2010; Molina et al., 2009; Stain Husen et al., 2003) to 70% (Begul et al., 2001; Barkley et al., 1990; Hart et al., 1995; Luv et al., 2014; Sibley et al., 2012) and even 80% (Beaderman et al., 1996; Richards et al., 2014; Riddle et al., 2013) while passing from childhood to adolescence

period. Beside chronic nature of this disease, a high rate of comorbidity is the other worrying issue that is a feature of ADHD (Miranda, Colomer, Fernández, Presentación, & Roselló, 2015).

Attention deficit-hyperactivity disorder is a prevalent neurological disorder which accompanies several symptoms in childhood and adulthood (American Psychiatric Association, 2013). Although the behavioral and cognitive aspects of ADHD are known, the special pathophysiological mechanisms and the remaining changes of ADHD brain structure is still vague (Krain & Castellanos, 2006). Regarding the points mentioned above, it can be stated that different approaches have been employed to treat this disorder. The frequency of the employing these treatments is as follows: pharmacotherapy, cognitive-behavioral therapy, parents training and social skills training (Hanser & Meisslerand Overs, 2000).

As it was said, one of the helpful treatments which can be very useful for the ADHD sufferers is cognitive function. Cognitive function is the product of processing stages of the brain and is divided into two categories: the first one is rule base function that regulates and controls the thought and the function of a person and is known as the executive function; the second one is the non-rule base function which is based on the excitements, inclinations, social cognition and other effective situational factors. On the other hand, executive function includes cognitive flexibility and the management ability of intervening components of goal-oriented behaviors and the prediction of the results of a performance; furthermore, executive function also consists complex planning of behavior and problem solving. It is supposed that executive function is involved in a wide variety of the daily activities of a person. The activities which necessitate the executive function are time tables and meetings, understanding the medical information, riding a motorcycle, taking proper medicines, cooking, wearing clothes and doing house chores. The executive functions include the self-control behaviors which are employed to protect the performances and to guide the behavior in the framework of purposes and rules (Mahone, Cirino, Cutting, Cerrone, & Hagelthorn, 2002). To differentiate the executive functions from how and why of human behaviors, a group of scientists classify these functions in different cognitive domains which consists behavior planning and organizing, resposerestraining and controlling, function continuity, domination reduction and the ability to start a function. The evidences based on the division of executive function into three components, present a cognition which include control, transmission and update which although are separable, they act all together in the regulation and control process of most of the functions. Among other components which have been introduced by the researchers are planning, decision making and problem solving. There also another classification which categorizes the executive function to main domains including five components of immediate control of response, planning, cognitive flexibility, attention transmission and the working memory (Miyake & Friedman, 2000).

It should be noticed that according to above observations, there is a difference between the continuous function test of auditory and visual stimuli (IVA) and investigating the efficiency of the children who suffer from attention deficit-hyperactivity disorder. Therefore, regarding the high rate of outbreak of this disorder among the children, the present study can effectively improve the theoretic and applicable results in various fields. Therefore, the researcher is going to investigate if there is a difference between the continuous function test of auditory and visual stimuli (IVA) of the children suffering from the attention deficit-hyperactivity disorder and the normal children of Tehran?

2. Methodology

The present descriptive study is of comparative type of research. The participants of this study have been chosen among the hyperactive and normal high school students aging from 12 to 18 in Teheran. Using cluster sampling method, the researcher sampled 30 ADHD sufferers among high school students of Teheran. The suspicious students were labeled as hyperactive students through executing Connors Test in order for the exact and non-overlapping recognition. The normal high school students were chosen using two-step cluster sampling. In the first step, 5 girls' school and 5 boys' school were randomly chosen among Teheran high schools. Then, three classes were again randomly chosen to finally choose the normal sample and were classified as two groups of 30. Participants' informed consent and proper age are the criteria of being considered as a participant. The participants could quit participating in the research by withdrawal from continuing the study for various reasons, not filling out the questionnaire or just giving back the questionnaire and not intending to take part in IVA test. The descriptive and inferential statistics were employed to analyze and interpret the collected data of the research. While descriptively studying the data, frequency, mean, percentage, density percentage and standard deviation were used and while inferentially analyzing the data, Box and Levene test were respectively done in order to examine the theory of homogeneity of co-variances and variances. Next, the parametric test of multivariable variance test was applied to check if there is a difference between the children suffering from attention deficit-hyperactive disorder and normal children. The statistical findings were analyzed using SPSS-20.

2.1 Data Collection

The data collection tools of the present paper are the demographic questionnaires, the questionnaire of children suffering from attention deficit hyperactive disorder and IVA+AE questionnaire.

2.1.1 Demographic Questionnaire

The letter sent: the purpose of collecting data through questionnaire and the necessity of participants' cooperation was intimately explained in this letter and at the end; the researcher thanked and admired the participants' cooperation.

General questions: this section allocate to the general questions to which the participants are supposed to reply. It includes age, education, the number of children, and the salary of the family.

Technical questions: this section employed Connors questionnaire in order to recognize the hyperactivity disorder among the participants and IVA+AE test was also used to investigate the continuous function of auditory and visual stimuli.

2.1.2 The Questionnaire of Children Suffering from Attention Deficit-Hyperactivity Disorder

The children who suffer from the attention deficit-hyperactivity disorder and are incapable of learning will be recognized according to DSM-V criteria and also clinical interviewing and following tools.

2.2 Connors Questionnaire

This questionnaire has been used in order to recognize the hyperactive children. The reliability of this questionnaire, that is 0.71, was calculated through dividing it into two groups of odds and evens. Besides, the validity of it has also been authenticated by neurologists (Ghamari Givi, 1997).

The questionnaire includes 48 clauses of which 6 investigate hyperactivity factors including attention disorder-focus (learning), conduct disorder, impulsivity disorder, hyperactivity, psychosomatic disorder, and anxiety problem (Connors et al., 1998). In a study done by Khushabi et al., the reliability of the questionnaire (0.93) was calculated using Cronbach Alfa. They also found out that the highest score which can be achieved by a normal child is 38 (Khushabi et al., 2002). Kronenberger and Meyer state that Connors has mentioned to the scores more than 60 as higher than average (Kronenberger et al., 2001).

3. IVA+AE Questionnaire

IVA+AE test was edited based on the recognition instruction and statistics of mental disorders of DSM-V and it concerns the recognition and division of different DHDs including attention deficit, hyperactive, combined type and unidentified type (NOS). The developers of this test never tried to artificially make a "special cut-off point". On the other hand, those who suffer from acute or severe brain damage are recognized as "severely damaged" in this test. IVA test, according to Kjellberg model (1987), evaluated attention as a multidimensional cognitive element. Attention is categorized into five dimensions in this model.

(1) Focused Attention: capability of correctly reacting to auditory and visual stimuli presented in this test (no one). This dimension of attention is evaluated by subscales of prudence and vigilance.

(2) Sustained Attention: capability of sustainably and validly continuing reaction pattern. This dimension of attention is made through changes which are occurred while reacting time during doing the test. The related scales to this dimension are stamina, consistency and focus.

(3) Selective Attention: recognition capability to correctly respond to the target stimulus and inhibiting the wrong response while facing false stimuli. The related scales are prudence, comprehension, and vigilance.

(4) Alternating Attention: cognition flexibility in attention transfer from visual to auditory and vice versa is called alternating attention. The difference between the auditory and visual scales of speed, balance, readiness, consistency and focus can show the strength or weakness of this very dimension of attention.

(5) Divided Attention: the capability of simultaneous reaction to different tasks is called divided attention. A balance is made between the speed and accuracy of the participants in two auditory and visual dimensions. The difference between the scores of speed scale and prudence would examine the problems of divided attention.

The standard score of IVA test and descriptive dimensions of it are stated in the following table.

4. Findings

The table of descriptive findings is shown first and then the related findings to the research hypotheses are presented.

Table 1. Descriptive statistics related to the variable of auditory dimension of different types of attention

Dimension	Variable	Group	Mean	Median	Standard Deviation
Auditory	Focused Attention	ADHD	77.10	76.0	17.13
		Normal	104.07	105.50	7.96
	Alternating Attention	ADHD	90.72	93.20	11.42
		Normal	96.41	96.40	8.03
	Sustained Attention	ADHD	83.37	89.0	17.20
		Normal	87.61	86.33	10.79
	Divided Attention	ADHD	94.47	95.0	9.38
		Normal	102.95	101.50	8.52
	Selected Attention	ADHD	73.53	78.17	15.52
Normal		97.85	101.67	11.32	
Visual	Focused Attention	ADHD	80.74	80.0	14.24
		Normal	97.93	99.50	7.78
	Alternating Attention	ADHD	97.87	97.80	6.97
		Normal	99.20	100.80	8.72
	Sustained attention	ADHD	93.31	94.0	10.42
		Normal	96.57	98.67	12.53
	Divided attention	ADHD	83.96	84.50	8.90
		Normal	95.59	97.0	5.92
		Selected Attention	ADHD	76.97	78.0
		Normal	90.73	92.33	11.29

Taking Table 1 into notice, we will figure out that the score of selected attention for the students suffering from attention deficit hyperactivity disorder is 73.53 which compared with the standard score of IVA that ranges from 70 to 80, it can be concluded that the people suffering from attention deficit hyperactivity disorder are categorized in weak group. While the score of the selected attention of normal students equals 97.85 which compared with the standard score of IVA test are classified as higher than average students. Besides, the score of selected attention of the students suffering from attention deficit hyperactivity disorder is 76.97 which compared with the standard score of IVA test that ranges from 70 to 80. So, the people recognized as ADHD sufferer are classified as weak category. While the score of selected attention of normal students is 90.73 and this score categorizes the students in the medium class.

While examining the normality of the data, the null hypothesis based on the fact that the data are normally distributed, is tested in the tolerance of 5%. Therefore, if the significant correlation is more than 0.05, there won't be any reason to reject the null hypothesis. On the other hand, the data are normally distributed. The significant correlation achieved for the research variables in both ADHD sufferer students and normal students will be more than 0.05, so the research variables are normal. The significant correlation of the variables is more than 0.05, therefore the variance of both groups of students are equal.

Table 2. The Results related to the analysis of multivariable variance of auditory dimension variable of different types of attention

Test Name	Value	Hypothesis df	Error df	F Test	Significant correlation
Pillay trace test	0.727	5	45	23.93	<0.001

As it has been illustrated in Table 2, the significant correlation of the auditory variable of different types of attention group, i.e., normal students and the students suffering from attention deficit hyperactivity disorder, is less than 0.05 except sustained attention; it means that there is a significant correlation between the normal students and those who suffer from attention deficit hyperactivity disorder from one of the dimensions of dependent variables (focused attention, alternating attention, divided attention, selected attention among the variables of visual variables).

Table 3. The results related to the analysis of multivariable variance of auditory dimension variable of different types of attention

Variable	Sum of Squares	df	Mean of Squares	F	Sig	Eta ²	Observed power
Focused Attention	9928.025	1	9928.025	55.77	0.000	0.532	1.00
Alternating Attention	474.293	1	474.293	4.68	0.035	0.087	0.564
Sustained	41.908	1	41.908	0.202	0.655	0.004	0.072
Divided Attention	1367.317	1	1367.317	18.612	0.000	0.275	0.988
Selected Attention	8042.996	1	8042.996	29.475	0.000	0.376	1.00

As it has been demonstrated in Table 3, the variable of focused attention among the auditory dimension present the value of 55.77 in F test which has a significant correlation with the significant correlation of 0.000 because it is less than 0.05. These findings show that there is a significant correlation between normal students and the students who are suffering from attention deficit hyperactivity disorder in focused attention among the auditory dimension. Regarding the achieved mean of the scores of focused attention of normal students is significantly more than students suffering from ADHD; however, the students categorized as ADHD sufferer are classified in weak class and normal students are classified in higher than average class. Furthermore, the F test for the alternating attention of auditory dimension shows the value of 4.68 which has a significant correlation with 0.035 because it is less than 0.05. The same test provides the value of 0.202 that doesn't have a significant correlation because it is more than 0.05 (0.655). Divided variable which is a subdivision of auditory dimension gets the 18.612 value which has a significant correlation with the value of 0.000 since it is less than 0.05. The last variable, selected attention was scored 29.475 in F test, which is significantly correlated (0.000) because it is less than 0.05.

Table 4. The results related to the analysis of multivariable variance of visual dimension variable of different types of attention

Test Name	Value	Hypothesis df	Error df	F	Sig
Pillay Trace Test	0.456	5	47	7.882	<0.001

As it has been shown in Tables 1-4, taking the visual dimension variable of different types of attention—the normal students and the ADHD sufferer into notice, it can be seen that the significant correlation of the tests would be less than 0.05 which means that regarding at least one of the dependent variables (focused attention, divided attention, selected attention among the visual dimension), there is a significant correlation between the normal students and those suffering from ADHD.

Table 5. The results related to the analysis of multivariable variance of visual dimension variable of different types of attention

Variable	Sum of Squares	df	Mean of Squares	F	Sig	Eta ²	Observed power
Focused attention	3975.442	1	3975.442	30.87	<0.001	0.377	1.0
Alternating attention	23.293	1	23.293	0.369	0.546	0.077	0.092
Sustained attention	236.215	1	236.215	1.926	0.171	0.036	0.275
Divided attention	1786.193	1	1783.193	31.964	<0.001	0.385	1.0
Selected attention	2412.343	1	2412.343	13.294	<0.001	0.207	0.947

As it is shown in Table 5, the F test for alternating attention of visual dimensions is 0.369 and the significant correlation is 0.546 which is not significant because it is more than 0.05. The findings state that there is no significant correlation between normal and ADHD sufferer students in relation to alternating attention of visual dimensions. Regarding the means of the scores of the normal students in relation to alternating attention of visual dimensions is more than that of those students who suffer from attention deficit hyperactivity disorder, this difference is not significant and the ADHD students and normal students are categorized as higher than average group. Moreover, the F test of sustained attention of visual dimensions is 1.926 and the significant correlation of it is 0.171 which is more than 0.05, so it is not significantly correlated. The value of F test for divided attention is 31.964. The significant correlation is 0.000 and it is correlated because it is less than 0.05. The selected attention of visual dimension has a F test of 13.294, of which the significant correlation is 0.000 and therefore significantly correlated because it is less than 0.05.

5. Discussion and Conclusion

As it was presented in the findings of the research and according to what is shown in Table 1, auditory dimension variable of different types of attention the significant correlation of both groups of normal students and those students who suffer from ADHD is less than 0.05 except sustained attention, which means that there is a significant correlation between normal students and those who suffer from ADHD at least in relation to one of dependent variables (focused attention, alternating attention, divided attention, selected attention of auditory dimensions).

These findings state that there is a significant correlation between normal students and ADHD sufferer students in relation to focused attention of auditory dimensions. Regarding the achieved means, the score of normal students in focused attention of auditory dimensions is significantly more than the scores of ADHD sufferers. The ADHD sufferers are categorized as weak group while the normal students have been classified as higher than average group. Furthermore, the findings show that there is a significant correlation between the normal and ADHD sufferer students in relation to alternating attention of auditory dimension. Taking the achieved scores into notice, Table 3 shows that the score of alternating attention of auditory dimension is significantly more than score of ADHD students. Besides, the normal students and ADHD students do not show a significant difference in relation to sustained attention of auditory dimension but the divided attention of auditory dimension of both groups is significantly correlated between normal and ADHD students. The same results exist for the selected attention of auditory dimension of both groups of students. Looking at the means of scores of normal students and ADHD students, we can see that the score of normal students is significantly more than ADHD students. The ADHD students are grouped as weak and the normal students are classified as higher than average group.

The present research and the following researches have the same results:

Jackson (2003) studied the methods of music therapy and their role in early treatment of primary students who suffered from ADHD. Another research was done by Garcia et al. in 2007; they tested the auditory attention of 40 children aged from 6 to 9. Janatian (2006) studied the effectiveness of playing on the reduction of the symptoms of hyperactivity disorder among the students of third and fourth grade of primary schools of Esfahan.

Zemestani and SeifNaraghi (2009) did a study on the particulars of auditory memory of the children who suffer from ADHD. Karimi and Zare (2013) investigated the effect of music on the sustained attention of the children who suffer from attention deficit hyperactivity disorder. Sarly et al. (2013) did a study titled "the effect of

computerized auditory tasks on the sustained attention of 20 children (aged from 9 to 11) who suffer from attention deficit hyperactivity disorder.

To explain these findings, it can be stated that there is a difference between auditory dimension of different kinds of attention in normal people and those who suffer from attention deficit hyperactivity disorder; the hearing ability is defined as a skill in learning process. As it was supposed, one of the features of this disorder is behavioral unsustainability, the children who have problem in auditory perception don't have a problem in hearing, they have problem in auditory perception. One of the features of the people who suffer from ADHD in auditory dimension is their inattention to their surrounding environment and this inattentiveness will result in decentralizing, failing to complete their assignments, making mistakes while doing tiring assignments and frequent changing of the activity. Furthermore, the continuity of reduction of attention deficit hyperactivity disorder in the auditory dimension of the children is caused by the fact that the children need more time to generalize their learning to the outside environment. To confirm the results of the studies done on ADHD, there are some evidences that show ADHD sufferer, compared with normal people, act slower in doing their auditory assignments and processing the auditory stimuli. According to the theory of information process, it can be said that the problem of these people is getting the input and recognizing the received information from the environment and this fact leads to auditory or visual incompetence and consequently, the person with good hearing ability will have problem in getting the received sounds. According to this view, the function of human mind can be analyzed step by step; it includes inputs, storage and outputs. Meanwhile, the attention is paid to the first step of storing the information in the brain (inputs) which leads to the selective process of the inputs among the wide range of stimuli. The existence of deficiencies in processing skills would result in the indication of problems in the processing cycle and this will cause the input not be fully processed and some of the delivered information is removed.

Also it is shown that, visual dimension variable of different types of attention the significant correlation of all the tests of all the normal and ADHD sufferer students is less than 0.05 except alternating attention, sustained attention which means that there is a significant correlation between the normal students and those who suffer from attention deficit hyperactivity disorder at least in relation to one of dependent variables (focused attention, divided attention, selected attention of variables of visual dimension).

The findings indicate that there is a significant correlation between normal students and the ADHD students in relation to focused attention. Regarding the achieved means of focused attention of normal students are meaningfully more than ADHD students. There isn't a significant correlation between normal and ADHD students in relation to alternating attention of variables of visual dimension. Taking the achieved means of alternating attention of normal students into notice, it is shown that the scores of normal students are more than ADHD students and this difference is not significantly correlated and the members of normal group and ADHD group are both classified as higher than average class. Besides, the findings illustrate that there isn't a significant correlation between normal and ADHD students in relation to sustained attention of visual dimension but there is a significant correlation between the normal and ADHD students in relation to divided attention of visual dimension. Regarding the calculated means of normal students in divided attention of visual dimension, it is observed that the means are significantly more than the score of the students suffering from attention deficit hyperactivity disorder. The difference between normal and ADHD students in relation to selective attention of visual dimension is also significantly correlated. The means of normal students of selective attention is more than the scores of ADHD students. The ADHD students were categorized as weak and the normal students were grouped as higher than average.

The results of this study consist with Moorey (2000), Taghavi (2011), Karimi and Zare (2013) and Ibrahim pour (2013). Ibrahim pour (2013) investigated the impact of computerized cognitive empowerment on the function of active memory, attention, language ability, spatial visual ability and the fluency of old people.

Explaining the findings, it can be added that visual perception is one of sensory ways through which the human being can gain lots of information and save them in his memory. Visual perception is an essential factor in learning process and those people who suffer from some sort of learning disabilities, like the ADHD sufferers, are not able to make good relationship compared with their peers, they disobey the rules, swear, lie, speak impolitely, can't restraint, take lots of risks; they are aggressive and are not able to solve social problems because they are not smart enough or suffer from special learning disabilities, they cannot concentrate, they get distracted easily, they cannot fully control the impulses and make more destruction in comparison with normal children; besides, the hyperactive children are defined as sad and restless children who are not able to stay in one place for long.

The children who suffer from attention deficit hyperactive disorder cannot solve complicated tasks because they are not able to organize and focus their sustained attention on doing something; it can be further said that since the children who suffer from attention deficit hyperactivity disorder are weak at practical intelligence compared with verbal intelligence and since they have deficiency in perceptive-dynamic skills and spatial organization, they perform poorly in graphical tests compared with their peers. The existence of deficiency in sustained attention and this deficiency would cause the children to be easily distracted even after choosing the best stimuli and then they cannot concentrate on doing the rest of task. The results of this paper approve this issue. The results of this paper are only applicable to a specific sex, education and age group. Therefore, the generalization of the results to other sex or age group is limited. Other limitation of this study was the shortage of national and international sources to make a more comprehensive literature review. So it is suggested to other scientists to work more extensively on different age group and other educational institutes in future researches. Moreover, since the students who suffer from attention deficit hyperactivity disorder have pay less visual and auditory attention compared with normal people. Then, it is a good suggestion to the primary school counselors, clinics and family consultation center to try harder to recognize and then treat the attention deficit hyperactivity disorder. Totally speaking, the findings of the present paper show that empowerment through IVA would affect the efficiency of the ADHD children, so the cognitive empowerment is of high importance in preventing from the occurrence of such cognitive disorders.

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Predictive Model of Happiness on the Basis of Positive Psychology Constructs

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Abstract

The purpose of the present study was to offer predictive model of happiness on the basis of positive psychology constructs. It is among correlational studies through applying causal modeling. The statistical population of the study included BA students at the University of Isfahan and Industrial University. A sample of 420 individuals was selected via multi-stage clustered random sampling method. The measurement instruments included Oxford's happiness questionnaire (Argyle, 1989), psychological well-being (Ryff, 1989), quality of life (Cummins, 1997), Polotzin and Elison's spiritual Well-Being (1982) and Bar-On's Emotional Intelligence (2000). The data were analyzed through Amos22 software. Results showed that the model with supposed indexes owned an appropriate goodness of fit. The results implied that the greatest amount of variance of happiness is explained by the direct effect of quality of life and indirect effect of emotional intelligence with mediating of quality of life. The direct effect of emotional intelligence with mediating psychological wellbeing and indirect effect of emotional intelligence on happiness with mediating spiritual wellbeing explains the variable of happiness at medium level. Finally the role of positive psychology constructs especially quality of life and emotional intelligence is confirmed in happiness and the results state the importance of positive psychology constructs in happiness.

Keywords: positive psychology, constructs, happiness, emotional intelligence, psychological wellbeing, quality of life, spiritual intelligence

1. Introduction

Happiness and well-being have been among the basic and important issues from the time of human creation philosophical systems and religions have continuously been seeking to answer the question of how to reach an accordance, internal peace and happiness. Stewart (2010) has stated that happiness is one of the most important subjects proposed in positive psychology. The positive psychology has been defined as the knowledge of living happily (Carr, 2004). In contemporary psychology, the new approach of positive psychology is introduced as a way for approaching the authentic happiness (Compton & Hoffman, 2012). Happiness is considered as owning a positive inner experience and also as a powerful motivation for the human healthy behaviors (Argyle, 2001). Happiness is also estimated as an overall and persistent satisfaction of life (Bekhet et al., 2008). In recent years, too, happiness has been considered as an index regarding how the person spends his/her life moment by moment and a combination of transient moment experiences which can form a scale for the wellbeing and health (Wren-Lewis, 2014).

While the previous trend of happiness studies have been from "bottom-up" and extended to internal factors. It could be concluded that subjective factors of happiness were ignored in this studies. Given to the fact that most researches during the past decades had focused on the external factors, recent trend focus on the process of happiness from internal to external factors and emphasize from "top-down" and intrapersonal processes (Diener, 2009).

It could be concluded that subjective factors of happiness were ignored in previous studies. Nowadays it seems that the requests of people for being happy has been increased. There is also growing interest in scientific studies of happiness. According to the Lyobomersky (2005), there are three major factors of happiness's present life

conditions, personality traits and unconscious behavioral attitude. Studies around this concept of happiness, show that there are different variables which influence the experience of happiness and that there is not only one method which lead to happiness (Warnecke et al., 2014).

2. Positive Psychology Constructs

2.1 Emotional Intelligence

Emotional intelligence is one of the constructs in positive psychology (Brackett et al., 2006). With the appearance of the emotional intelligence construct in 1990, a positive insight toward emotions was started. Emotional intelligence is crucial in the explaining of individual differences in the degree of happiness (Dawda & Hart, 2009; Saklofske et al., 2003; Petrides & Furnham, 2007; Chamorro-Premuzic, 2007). Gallagher and Vella-Brodick (2008) proposed that emotional intelligence is dependent to both affective and cognitive aspects of happiness. Baron (1997) and Golman (1998) suggested the emotional intelligence as the combination of cognitive abilities with personality characteristics. Golman (1998) believed that the emotional intelligence could be increased in adulthood by training. Recent evidences imply that people with emotional intelligence are healthier, happier and benefit from a more constructive life style. With recognizing the emotional intelligence (EI) as one of the essential variables explaining the individual differences, growing evidences have been showed the positive relationship between emotional intelligence and subjective wellbeing criteria such as satisfaction of life, self-esteem, self-acceptance and positive emotions (Carmeli et al., 2009; Gallagher et al., 2008).

2.2 Quality of Life

One other constructs in recent literature received considerable attentions in predicting the happiness, is quality of life (Meeberg, 1993; Taillefer et al., 2003). According to Diener (2000) whether people show happiness or not is related to their cognitive appraisal of their quality of life. Quality of life means persons' perspective about their health status and the degree they are satisfied from this status (King, Proutt, & Phillips, 2006). In fact Quality of life involves the subjective and objective aspects of life which are in interaction with each other. Further, each aspect of life quality can remarkably affect other life aspects (Newaand Taylor, 1999). According to WHO complete definition of quality of life includes the persons' perception of his/her present status considering the culture and value system wherein he/she lives and the relation of their perception with goals, expectations, standards and personal priorities (Eliss, 2003).

2.3 Psychological and Spiritual Well Being

Wellbeing is also defined as the human's desirable performance (Nell, 2011). Howell et al. (2013) consider wellbeing as comprising of emotional, psychological and social aspects. Steger and Frazier (2005) consider wellbeing a combination of self-esteem, optimism and satisfaction of life. Moreover, psychological wellbeing is defined as the growth of real potentials of each person. Pekrun et al., Kashdan and Nezlek (2012) know the result of wellbeing as having self-esteem, positive affection and lack of negative affections. The people with high psychological wellbeing experience positive emotions and have positive evaluation from accidents and occurrences around themselves, while the people with feeling of low wellbeing evaluate accidents and occurrences around themselves undesirable and experience more negative emotions such as anxiety, depression and anger (Diener, Lucas & Oishi, 2003). Besides psychological wellbeing, spiritual wellbeing, too, can affect happiness. It seems that spiritual well-being is related to different aspects of mental and physical health (Ridnour, 2008). Fisher et al. (1998) considers the spiritual wellbeing as one fundamental aspect of health and wellbeing and coordinating and completing power of the human's health (physical, mental, social and emotional aspects). Spirituality is as an important aspect of the human's positive performance that Dierendonck (2012), Dierendonck and Mohan (2006) have introduced as wellbeing components. Ellison (1983), Ellison and Smith (1991) reasoned that the spiritual aspect provides a coherent power for the happiness of mind and body. In fact Ellison (1983) believed that "if we have spiritual health, we will have the feeling of being alive, purposeful and psychological wellbeing". According to Ellison's view (1998), spiritual wellbeing includes two components of religious health and existential health. Existential health would form mental-social components which reflect the person's purpose and performance which relates to having good feelings, self-acceptance, positive interpersonal communications, independence, dominance on the environment and personal growth; further, religious health reflects the person's good feeling regarding the god. Religious health reveals participation in meaningful activities. Spiritual wellbeing is a feeling of being attached, interpersonal coordination, nature and transcendental existence which is accessible through the process of dynamic and coherent growth and leads to recognizing final purpose and life meaning (Hungelman et al., 1985). Gomez and Fisher (2003) define the spiritual wellbeing as a state of being, positive feelings, recognizing communication with the self, others and a supernatural power and also nature that in case of its presence, the person will feel identity, perfection, satisfaction, enjoyment,

contentedness, beauty, love, respect, positive attitude, peace, internal balance and will have life purpose and orientation.

Through extensive review of study literature, there are few studies regarding combination and role of positive psychology constructs as effective psychological resources on happiness and in fact a comprehensive and consistent model of important variables in this area has not been synthesized and the present studies have solely addressed some variables. The current studies are going to offer a model and test it in predicting happiness according to the variables of emotional intelligence, spiritual wellbeing, life quality and psychological wellbeing in the students of state, industrial and Isfahan universities through which its direct and indirect effects on happiness are investigated. The supposed model by the researcher is the following:

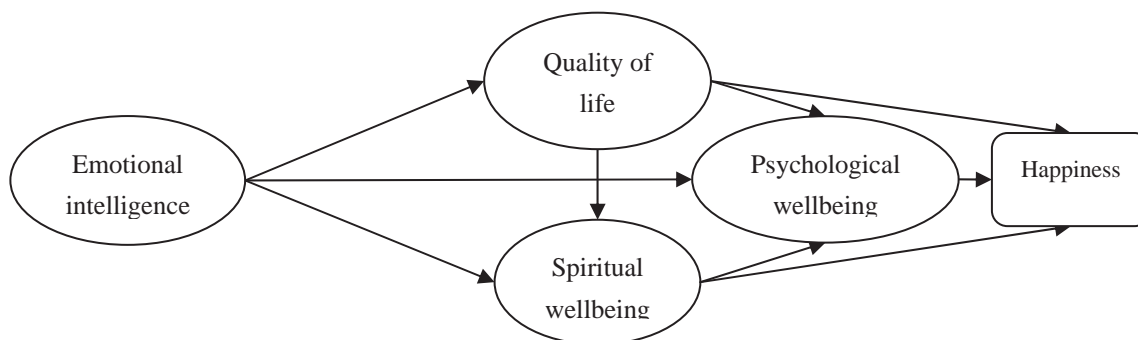


Figure 1. The proposed model

3. Study Method

The present study was conducted aiming to investigate the role of positive psychology construction the happiness and it is among correlational studies through applying “causal modeling”. This model responds the questions related to the power of causal relations (direct, indirect and total) between latent variables and the amount of variance explained in the entire model. In order to investigate the study hypotheses, the structural equation modeling was used. The independent variables of the study were entered the structural equation model in the form of latent variables and as first-order factor models and so was the dependent variable as the explicit variable. The statistical population of the study included all BA students at Isfahan and industrial universities. According to the report by the office of teaching at the above-mentioned universities the total number of 3866 and 4804 BA students were selected respectively as the population of the study. For a population with this size, the sample size was determined 410 individuals based on Cohen et al. (2002) size determination table which equals Krejcie and Morgan’s (1970) size determination table. In this study the participants were randomly selected from BA students of different majors (including humanities, basic sciences, agriculture and technical engineering) through multi-stage clustered random sampling method and the portioned ratio of gender was considered in the whole sample.

The data of this study were analyzed via AMOS 22 software. Therefore at first, the data were entered to SPSS 22 software and then transferred to AMOS 22 environment for modeling.

4. Instruments

4.1 Cummins’ Life Quality Questionnaire

Cummins’ life quality questionnaire (1977) examines the people’s values in two objective and subjective aspects. It assesses seven materialistic, hygienic, intimacy, social base, optimization, happiness and security areas. It owns three distinctive parts. The first part addresses questions regarding objective aspects of each eight-fold area. For each area three questions have been designed each one whereof has five alternatives which are scored from 1 to 5. In order to calculate the objective scores, the scores of these three questions are added up and the scores of each area is achieved. From adding up the scores of eight areas, total objective score is achieved. Further, two other scores are calculated in the questionnaire including the score of importance and the score of satisfaction. These two scores are applied to calculate life quality in the subjective aspect. Hence the scores of the importance are changed into a scale of -1 to +4 and these scores are multiplied by the scores of satisfaction and the answer is considered as the score of life quality. From the sum of eight areas calculated through this method, total score of

subjective life quality is achieved. Cummins (1997) reports the reliability degree of this scale 0.76 in the aspect of importance, 0.80 in the aspect of satisfaction and 0.81 in the aspect of satisfaction multiplied by importance. In this study the degree of internal consistency coefficient according to Cronbach alpha were achieved 0.71, 0.83 and 0.85 respectively in the aspect of satisfaction, importance and satisfaction multiplied by importance respectively. An example of the questions of this questionnaire is the following: “how often is it possible for you to have a comfortable sleep? How much are satisfied with your hygiene and health?”

4.2 Bar-On's Emotional Intelligence Questionnaire

It is composed of 117 questions and 15 scales administered by Bar-On on 3831 people from 5 countries (Argentina, Germany, India, Nigeria, and South Africa) and normalized in North America. In scoring method, the emotional intelligence has been divided into 5 subscales. The scale of intrapersonal skills includes subscales of emotional awareness, self-expression, self-respect, self-actualization and independence. The extra-personal scale includes the subscales of sympathy, social accountability and interpersonal communication; coping stress (controlling stress) scale includes subscales of bearing stress and controlling impulse, adaptation scale includes subscales of flexibility, problem solving, reality-measurement and the scale of general temper includes the subscales of happiness and optimism. Bar-On (1997) has reported 0.75 the validity of fifteen-fold scales of the questionnaire through retesting. In the present study, the degree of internal consistency of this questionnaire has been achieved 0.87 through alpha cronbach. In order to investigate the factor loading of the questions and every aspect of emotional intelligence, at the first stage a first-order factor model was drawn which revealed acceptable amount for all items and the measurement model was confirmed. A sample of questions of this questionnaire is the following: “I am aware of my emotions”. “I can bear pressures well”.

4.3 The Questionnaire of Psychological Wellbeing

It was designed by Ryff (1989) and reviewed in 2002. This version includes 6 factors. Questions 9, 12, 18 assess independence factor, questions 1, 4, 6 assess dominance on the environment factor, questions 7, 15, 17 assess personal growth factor, questions 3, 11, 13 assess the factor of positive communication with others, questions assess 5, 14, 16 the factor of being purposeful in life and questions 2, 8, 10 assess self-acceptance factor. The sum of the scores from these 6 factors is considered as the total score of psychological wellbeing. It is a kind of self-assessment instrument. It is a kind of self-assessment instrument responded in a 6-degree continuum from “totally agree” to “totally disagree” that higher score shows better psychological wellbeing. Ryff (1989) has reported 0.89 the degree of reliability in this questionnaire. In this study the degree of internal consistency of the present scale was achieved 0.77 and the first-order and second-order factor model reports acceptable the factor loadings of the questions in this test. The sample of the questions of this questionnaire is the following: “the determined people affect me”, “I live for the present moment and I don't really think about future”.

4.4 Oxford's Happiness Questionnaire

For the first time, Argyle and Lu (1989, cited in Carr, 2004) designed this questionnaire. It owns 29 four-alternative items and it is scored according to a four-degree spectrum from zero to three and at last the final score is between zero and 78 (Kashdan, 2008). In the present study the alpha cronbach coefficient of this questionnaire was achieved 0.93. In order to investigate factor loading, the first-order model questions were drawn in the current study and all determiners related to this questionnaire own factor loading of 0.7 and higher and measurement model was confirmed. An example of these questions from this questionnaire is the following: “I don't feel happy (0), I rather feel like happy (1), I am very happy (2), I am too happy (3)”.

4.5 Spiritual Well-Being Questionnaire

The SWBS was developed by Ellison and Paloutzian (Ellison, 1983; Paloutzian & Ellison, 1982) as a 20-item measurement tool with two subscales: (a) the existential well-being scale, which measures the participants' environmental relationship meaning, the conditions that surround people affecting the way they live, and (b) the religious well-being scale, measuring the subjects' relationship with a higher power (God) in regards to commitment, behavioral interaction, communication, cooperation, level of friendship or degree of intimacy. The two subscales were combined to produce a total overall spiritual well-being score using a 6-point Likert-type scale (1=strongly disagree to 6=strongly agree). The Spiritual Well-being scale has consistently shown to be reliable and internally consistent. Hammermeister and Peterson (2001) reported alpha coefficients of the religious well-being scale to be .94, the existential well-being scale to be .80, and the spiritual well-being scale to be .89. In this study, alpha cronbach is 0.89. A sample of the questions from this questionnaire is the following: “I have a special spiritual relationship with god. Relationship with god plays a role in my health.

5. Results

5.1 Bivariate Relations

The means, standard deviations and correlations between measures are presented in Table 1. There is a significant relationship between variables of objective and Subjective life quality, spiritual wellbeing, as well as psychological wellbeing and happiness ($\text{sig}<0.05$). Through considering Pearson coefficients related to the relationship of each variable with happiness it can be stated that the relationship between subjective life quality, objective life quality, spiritual wellbeing, emotional intelligence and psychological wellbeing and happiness is estimated direct and strong; that is, happiness increases through increasing or reinforcing subjective and objective life quality, emotional intelligence, spiritual health and psychological wellbeing.

Regarding the relationship between independent variables of the study with each other it can be suggested that: a) there is a direct and medium relationship between objective and subjective life quality and there is a direct and strong relationship between the variables of spiritual wellbeing and subjective wellbeing. b) A direct relationship is estimated between variables of objective life quality and subjective life quality, spiritual wellbeing, and psychological wellbeing ($\text{sig}<0.05$). c) There is a significant relationship between the variables of subjective life quality and variables of spiritual wellbeing and psychological wellbeing ($\text{sig}<0.05$). d) Through considering Pearson coefficient amounts the relationship between the variables of spiritual wellbeing and the variable of psychological wellbeing is estimated direct and medium.

Table 1. Summary correlations, means, standard deviations for the emotional intelligence, objective quality of life, subjective quality of life, spiritual wellbeing, psychological wellbeing and happiness

	1.	2.	3.	4.	5.	M	SD
1. emotional intelligence	-					310/13	33/18
2. objective quality of life	0/55*	-				89/76	8/19
3. subjective quality of life	0/53*	0/58*	-			41/80	41/47
4. Spiritual wellbeing	0/64*	0/50*	0/49*	-		88/60	15/81
5. Psychological wellbeing	0/70*	0/50*	0/47*	0/58*	-	310/33	33/18
6.happiness	0/71*	0/65*	0/63*	0/62*	0/66*	41/46	13/10

* $p<001$

In order to investigate the relationships between variables, the structural equation modeling was used, the independent variables were entered to the structural equation model in the form of first-order factor models as the latent variable and so was the dependent variable (happiness) as the explicit variable. The estimations related to indexes of evaluating structural equation model generality and its basic parameters are reported in the following graph and table.

5.2 Mediation Model

The indexes of evaluating of structural equation model in Table 2 generality through taking suitable range of these indexes into account generally show that the codified model is supported by the study data; in other words, there exists the fitness given to the model. All indexes are in suitable range and imply suitability of structural equation model. The estimations related to the model's basic parameters (direct and indirect effects of independent variables on dependent) are reported in the following Table 3. The amounts estimated in Table 3 reveal that:

Variables entered in the structural equation model generally explain 75% of happiness variable that through considering effect size related to the individual, the determination coefficient of this amount is estimated high; in other words, the variables (emotional intelligence, spiritual wellbeing, life quality and psychological wellbeing) are highly able to explain the happiness variable.

The effect of variable of emotional intelligence on life quality, spiritual wellbeing, and psychological wellbeing is statistically significant ($p<0.05$). Through considering the effect coefficient regarding the variable of emotional intelligence on each of the above variables, it can be stated that the effect of this variable is estimated direct and strong; that is, the increase of emotional intelligence can highly lead to the increase of life quality,

spiritual wellbeing, and psychological wellbeing; further weakening or decreasing emotional intelligence, too, can highly lead to the decrease of these variables. When the life quality and spiritual wellbeing have mediator role, the direct effect of emotional intelligence on happiness is not statistically significant, while the direct effect of the variable of emotional intelligence on the variable of happiness with mediating role of psychological wellbeing variable is statistically significant ($p < 0.05$). Considering the amount of effect coefficient of the variable of emotional intelligence on happiness, this effect is estimated direct and medium.

The indirect effects of emotional intelligence is statistically significant on the psychological wellbeing ($p < 0.05$). Therefore, quality of life and spiritual wellbeing play the role mediator in the relationship between emotional intelligence and psychological wellbeing, considering the fact that the direct effects of emotional intelligence variable is statistically significant on psychological wellbeing with the mediation of these two variables; as a result, the mediation of life quality and spiritual wellbeing is estimated among partial mediations; finally, considering the amount of effect coefficient related to indirect effects of the variable of emotional intelligence on happiness with the mediation of two variable of life quality and spiritual wellbeing, it can be stated that these effects are estimated direct and medium.

The indirect effects of emotional intelligence on happiness is statistically significant ($p < 0.05$). Therefore quality of life, psychological wellbeing and spiritual wellbeing play the role of mediator in the relationship between emotional intelligence and happiness; considering the fact that the direct effect of emotional intelligence is not statistically significant on happiness with the mediation of life quality and spiritual wellbeing, therefore the mediation role of these two variables is estimated as the complete mediation between emotional intelligence and happiness and considering the amount of effect coefficient of indirect effects, these effects are estimated direct and medium, while considering the fact that the direct effect of emotional intelligence on happiness is statistically significant with mediation of psychological wellbeing, therefore the mediation of psychological wellbeing is estimated among partial mediation in the relationship between emotional intelligence and happiness; considering the amount of effect coefficient of indirect effect of emotional intelligence variable on happiness, this effect is estimated direct and weak. The direct effect of the variable of spiritual wellbeing on psychological wellbeing and happiness is statistically significant ($p < 0.05$).

Considering the amount of effect coefficient of spiritual wellbeing on psychological wellbeing and happiness it can be stated that these effects are estimated direct and weak; that is, the increase and decrease of spiritual wellbeing can weakly lead to the increase and decrease of the psychological wellbeing and happiness. The indirect effect of spiritual wellbeing on happiness is statistically significant ($p < 0.05$). Therefore, psychological wellbeing plays the role of mediator in the relationship between spiritual wellbeing and happiness. Considering the fact that the direct effect of spiritual wellbeing on happiness is statistically significant, so the mediation of psychological wellbeing is a partial mediation in the relationship between the variable of spiritual wellbeing and happiness and taking the indirect effect coefficient of the variable of spiritual wellbeing on happiness with the mediation of psychological wellbeing variable, this effect is estimated direct and weak.

The direct effect of the variable of life quality on the variable of psychological wellbeing and happiness is statistically significant ($p < 0.05$). Considering the amount of effect coefficient of the variable of life quality on psychological wellbeing and happiness, it can be stated the effect of this variable on psychological wellbeing is estimated direct and weak and the effect of variable of life quality on happiness is estimated direct and at medium-to-high; that is, the increase and decrease of life quality can weakly lead to increase and decrease of wellbeing and highly can lead to the increase and decrease of happiness. The indirect effect of the variable of life quality on the variable of happiness is statistically significant ($p < 0.05$). Therefore the variable of psychological wellbeing plays the role of mediation in the relationship between life quality and happiness. Considering the fact that the direct effect of life quality on happiness is statistically significant, so the mediation of psychological wellbeing is a partial mediation in the relationship between the variable of life quality and happiness and considering the indirect effect coefficient of the variable of life quality on happiness with mediation of psychological wellbeing variable, this effect is estimated direct and weak.

The direct effect of the variable of psychological wellbeing on happiness is statistically significant ($p < 0.05$). Considering the amount related to the effect coefficient of psychological wellbeing on happiness, it can be stated that this effect is estimated direct and medium; that is, the increase or decrease of psychological wellbeing can lead to the increase and decrease of happiness at medium level.

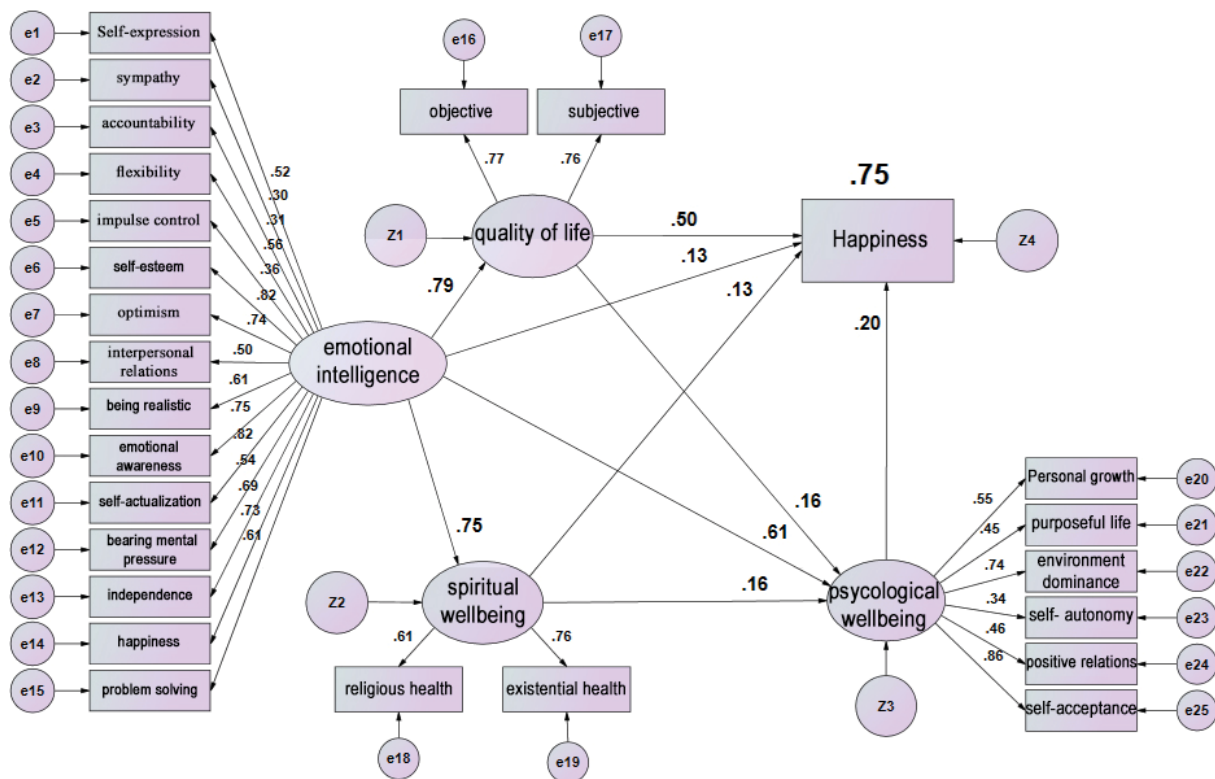


Figure 2. The hierarchical structure of happiness and the standardized factor loadings of the items and constructs

Table 2. The indexes of evaluating of structural equation model generality

df	CMIN/df	PCFI	RMSEA	Holter
291	4/18	0/73	0/08	110

Table 3. Estimating total, direct and indirect effects related to structural equation model

Independent variable	Mediator variable	dependent variable	Standardized total effect	standardized direct effect	Standardized indirect effect	Result
Emotional intelligence	-	Quality of life	0/79	0/79*	-	Strong Direct effect
	-	Spiritual well being	0/75	0/75*	-	Strong direct effect
Emotional intelligence	quality of life	Psychological well being	0/75	0/61*	0/14*	Partial mediation
	spirituality well being		0/80	0/67*	0/13*	
Emotional intelligence	quality of life	Happiness	0/67	0/25	0/42*	Full mediation
	spirituality well being		0/60	0/25	0/35*	Full mediation
	psychological well being		0/46	0/30*	0/16*	Partial mediation

Spiritual well being	-	Psychological well being	0/16	0/16	-	Weak Direct effect
	Psychological well being	Happiness	0/16	0/13*	0/03*	Partial mediation
Quality of life	-	Psychological well being	0/16	0/16*	-	Weak direct effect
	Psychological well being	Happiness	0/53	0/50*	0/03*	Partial mediation
Psychological well being	-	Happiness	0/20	0/20*	-	medium direct effect

*p<0/05

6. Discussion

According to the achieved results in the present study, generally the model has goodness of fit with data and the theoretical model conforms to the real data; in other words, the researcher's hypothesis was offered in the form of a theoretic model and all in all it conforms to the achieved data from the sample and it can be stated that the model has been confirmed.

The study results reveal that among the positive variables, life quality has the highest effect on happiness. Actually, the greatest variance of happiness is explained by the life quality. This finding is along with that of studies conducted by Toghyani et al. (2014); Lyumberski et al. (2009); Mitchell et al. (2009); Seligman et al. (2006); Bakhtiari et al. (2014). According to the conducted studies, when the distance between what the individual already has and what he/she wants to achieve decreases, his/her life quality will increase and it leads to happiness increase (Frisch, 2013). Simply, rising different aspects of life quality leads to the increase of wellbeing and health and it leads to creating a stable situation in personal performance in all aspects of life and communication with others and finally it causes the success in starting social communications and increasing self-confidence as well as self-esteem. Finally the increase of self-confidence and success in different life aspects can lead to the people's happiness and enjoyment which is along with Gordon et al. (2007); Keltner et al. (2012); Hilari et al. (2012) and Fagerlinda et al. (2010). Moreover, according to the achieved results, among positive psychological constructs, emotional intelligence has high effectiveness on happiness. The variables of life quality, spiritual wellbeing and psychological wellbeing play the role of mediator in the relationship between emotional intelligence and happiness. The indirect effect of emotional intelligence on happiness is significant with the complete mediation of life quality and it leads to the increase of happiness as a complete mediator. These findings are along with the findings of the studies by Auguto-Landa et al. (2006); Veneta et al. (2005) and Kiamarsi and Abolghasemi (2010). One of the important benefits is the ability of emotional intelligence is the improvement of negative emotions and nurturing positive emotions. Therefore the people, who are skillful in regulating their emotions, are more able to make up negative emotional states through participating in pleasant activities and emotional capacities play a significant role in adjusting stress and mental health. For example the ability of emotional control has relationship with the tendency to maintain positive temper and it leads to the prevention of depression states and elevation of life quality (Ciarrochi et al., 2002). The people with high emotional intelligence look at stressor events as a challenge and opportunity for learning and not a threat for the security. As a result, they experience less physiologic and emotional disorders and consequently own higher life quality and are happier.

Further, spiritual wellbeing mediates the indirect effect of emotional intelligence on happiness. In fact, emotional intelligence causes the increase of qualification, self-awareness, affective self-awareness, positive self-evaluation and self-esteem and these cases are the basic foundation of spirituality (Goleman, 1995). Besides, it seems that spirituality leads to creating the feeling of independence, self-support, qualification and self-emergence and creating some personal or social skills. Then those who have spiritual growth are interested in growth in both levels of personal and social skills along with emotional intelligence. Since spiritual people are often social, sympathetic and philanthropic and these factors show a high emotional intelligence. Regarding self-awareness,

the spiritual people have positive social attitudes, social extroversion, more psychological adaptation (adaptation to changes), appropriate interpersonal relations, positive value orientation, less psychosis, anxiety and criticism. There is a great similarity between awareness and the skill of qualifications coming from emotional, behavioral intelligence, attitude and outcomes of being spiritual (Tischer et al., 2002). Spirituality needs interpersonal and intrapersonal sensitivity. Attending to the thoughts, feelings, and creating sympathy and awareness of spiritual life requires owning ability to look at the affairs from various viewpoints and identify relationships between perception, beliefs and behaviors extracted from emotional intelligence skills (Vaughan et al., 2002).

Moreover, the results revealed that psychological wellbeing can directly and indirectly mediate emotional intelligence effect on happiness. The people with higher emotional intelligence have higher health and psychological judgment (Salovey et al., 1995; Gould et al., 1996). Previous studies have shown that the emotional intelligence has direct positive relationship with tendency to experience positive emotions (Galager & Valabrodic, 2008; Mikolajczak et al., 2008; Schutte et al., 2002). There is some evidence that the people with high emotional intelligence have reported life satisfaction (Petrides; GonzLez & Fumham, 2007), positive affections and more positive social interactions (Lopez et al., 2011; Gallagher, 2008; Mikolaczak et al., 2008; Schutte et al., 2002; Petrides et al., 2007; Lopes et al., 2011; Cameli et al., 2009; Chamorro-Premuzic et al., 2007; Gallagher et al., 2008; Bar-On, 2005; Adeyemo et al., 2008). General agreement is on this fact that emotional intelligence has relationship with meticulous perception, emotions emergence and regulation to cope with problems. Therefore, higher emotional intelligence at last leads to happiness (Bagheri et al., 2010). Further, the offered theoretic data reveal that the people with higher degree of emotional intelligence report more experience of psychological wellbeing comparing to those with lower emotional intelligence. There is a strong relationship between emotional intelligence and psychological wellbeing (Lu, 1995; Thompson & Heller, 1990). Psychological wellbeing has direct effect on happiness. Moreover, psychological wellbeing can be considered as the basic core to create positive affections (Kashdan et al., 2008). Lyubomerski et al. (2005) assumes happiness as the affective part of psychological wellbeing which in his viewpoint, depends to subjects like the individual hereditary background and environmental condition. Ryff and Singer (1998), Burns et al. (2010), have considered psychological wellbeing as an index to predict the duration of happiness.

Spiritual wellbeing, as the other effective variable on happiness, can estimate a part of variance of this variable. In a multi-national study, DelleFave, Brdar, Freire, Vella-Brodrick, and Wissing (2012) have surprised to see the importance of spirituality in creating happiness and life meaning. Anyway, Kashdan and Nezlek (2012) knows spirituality as a dominant part of the people's lives. Spiritual psychological wellbeing has direct effect on mental wellbeing and happiness that is along with the results of the study by Khumalo et al. (2014). Numerous studies support positive relationship between spirituality, positive wellbeing and low levels of mental syndrome (Park & Slattery, 2013; Steger, 2012). Spirituality relates to wellbeing through different methods such as individual values and the people's attitudes about themselves and the world (Kashdan & Nezleck, 2012). Spirituality is among intrapersonal features related to happiness. Numerous studies have pointed out the effect of spirituality on happiness (Argyle, 2001; Abdel-Khalek, 2006) and positive constructs like life satisfaction (Kelley & Miller, 2007; Zulling et al., 2006) and mental wellbeing (Ciarrocchi & Denek, 2006; Cohen, 2002). In various ways spirituality leads to the increase of happiness (Elision, 1991). Spirituality leads to creating meaning, consistency and purpose in life. Further, having a religious and spiritual belief, at least in adults, leads to creating a healthy life method. Spirituality leads to the increase of social relations (Elison, 1991) and social relations is an important factor in the increase of happiness (Lyubomirsky et al., 2005).

6.1 Limitations and Future Research

Motivation and the cause of happiness can be used in interpreting their choices and behaviors (Bergner et al., 2014). Finally according to the findings of the study and along with research literature, attending to the relationship between positive psychological constructs in facing stressor situations has found importance in designing intervening attempts to promote wellbeing and happiness more than before. In the current study the necessity of teaching effective and efficient methods based on positive psychological constructs is emphasized to decrease experiencing negative affections and increase happiness and life satisfaction. Taking the limitations of the sample group of the study on university students and not being comprehensive all variables of positive variables, it is suggested to be cautious in applying study findings on other statistical populations and investigate sample groups with different populations concomitant with other positive variables in future studies.

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Influence Satisfaction, Compensation and Work Discipline the Employee Performance at PT. Lion Air in Batam

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Abstract

This study aimed to analyze the extent to which the effect of satisfaction, compensation and discipline on the performance of employees at PT. Lion Air in Batam as well as to analyze the most dominant variables affect the performance of employees at PT. Lion Air in applying Batam. For goal then used descriptive analysis, multiple regression analysis, validity and reliability test and partial test and test simultaneously.

From the results of the regression equation the influence of variables (job satisfaction, compensation and working discipline) with the performance of employees at PT. Lion Air Batam, there was a strong and significant influence, because the higher job satisfaction, compensation and working discipline, the higher the employee's performance because it has a probability value of less than 0.05. Thus, in this study proved the first hypothesis. The most dominant variable affecting the performance of employees is job satisfaction, reasons for job satisfaction has a standardized coefficient of the largest value when compared with the variable compensation and work discipline.

Keywords: job satisfaction, compensation, work discipline, employee performance

1. Introduction

In today's global competition, the working world desperately needs people who can think for advanced, intelligent, innovative and able to work with high morale in the face of progress era no only that, under current conditions the role of human resources itself has an important role in an organization or company, also prioritized on mature managerial aspects in the management of the organization or company organization. Various trying to improve the performance of all elements within their respective organizations with the aim of achieving the survival of this company. Case increasingly competitive due to competition with other competing companies.

Rival (2009, p. 357) and Martoyo (2007, p. 126), suggest that compensation is something that employees received in lieu of their services to the company's contribution. Therefore, the existence of competition in various sectors to make the process of managing and maintaining the organization's management is getting serious attention from all elements within the company to create a managerial system that is resilient and able to follow current developments. Human resources in this case is the employee or employees at an agency or organization, of course, trying to work with their capabilities in order to achieve high performance. To improve the performance of employees, many factors need to be considered by companies such as satisfaction, compensation, discipline, and this work. In keeping kosher with research conducted by Trias (2011), which examines the motivation factor analysis, compensation and working discipline on employee performance through job satisfaction at the Muhammadiyah University Jember. Result research shows that compensation significantly influence job satisfaction and employee performance, labor discipline significantly affect performance and job satisfaction have a significant effect on employee performance. Ruky (2006, p. 15) points out: "The performance is a record of the results obtained from the specific job functions or activities for a certain period of time". In addition to these two variables, then the discipline of work is a factor that can affect the performance of employees, according to Mangkuprawira (2007, p. 122) that the discipline of work greatly affect the performance of employees, it is because discipline is a form of exercises for employees in implementing company rules, increasingly higher employee discipline employee productivity and company performance.

Siagian (2008, p. 305) states that: “Discipline is the management’s action to encourage members of the organization meet the various demands of the provision”.

According to Glanz, Shulman and Sullivan (2007), quality education partly depends on how well teachers are trained, compensated and supervised since they are one of the key inputs to education delivery. Employees generally perform well on the job when they feel that they are fairly compensated for their work (Gurbuz, 2009). Compensation is a form of reward that flows to employees arising from their employment. Employees’ satisfaction with their compensation usually influences their job satisfaction, which could lead to higher worker productivity (Mondello & Maxcy, 2009). Similarly, many researchers believe that supervision of instruction has the potential to improve classroom practices, and contribute to student success through the professional growth of teachers and improvement of their work performance (Yimaz, Tadan, & Ouz, 2009; Baffour-Awuah, 2011). Supervision is viewed as a co-operative venture in which supervisors and teachers engage in dialogue for the purpose of improving instruction which logically should contribute to teachers’ performance, and improved student learning and success (World Bank, 2011).

Hasibuan (2008, p. 193) states that: “Discipline is the awareness and the willingness of a person to comply with all company rules and social norms in force”. Steps to perform employee performance according to Dessler (2008, p. 3) are: Defining the job which means you and your subordinates agree on duties and standard positions, assess the performance which means comparing the actual performance of your subordinates with the standards that have been set, and the last step is the feedback that the intention is subordinate performance and progress are discussed and plans were made for the development of what is required.

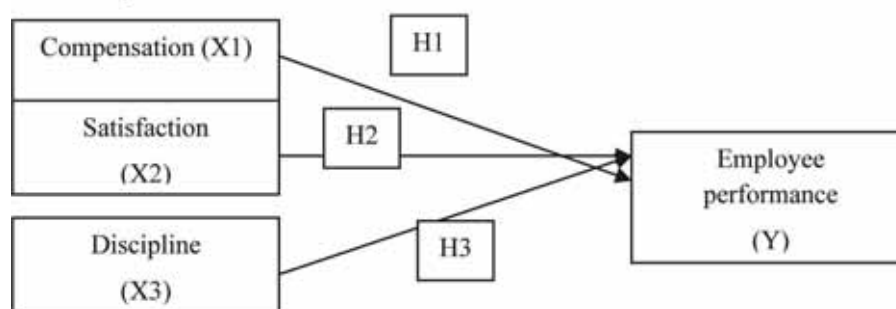


Figure 1. Framework research concept

2. Research Methods

2.1 Variable Operational Research and Definitions

Operational definitions, variables and measurement represents the union of views and similarity of opinion on some of the terms in this study were used as variables studied were as follows.

Table 1. Variable indicators framework research concept

variable	Definition	Indicator	Measurement
Job satisfaction (X ₁)	Expression of feelings felt by someone on his attitude feeling happy or not happy at work	-Income that I received in accordance with the position that my lap	Likert scale, with a score weights are: 1=Strongly Agree 2=Quite Agree 3=Neutral 4=Disagree 5=Strongly disagree
		-I feel I hold positions that are in accordance with ability	
		-I feel happy with the working conditions now	
		-I feel quite de-ngan income provided by this agency	
		-I guarantee keakra-tire with my colleagues both within like-anybody outside the company	
Compensation (X ₂)	Remuneration is given as a result of work activities	-The salary that I get to meet the necessities of life	Likert scale, with a score weights are: 1=Strongly Agree 2=Quite Agree
		-Salary received a fair manner	

		acceptable se-how to other employees	3=Neutral
		-The allowances given are appropriate	4=Disagree
		-Giving bonus-wan work on time	5=Strongly disagree
		-Medical benefits are awarded in accordance with the needs of employees	
		-With a high work discipline, the performance will be the maximum	Likert scale, with a score weights are:
		-Discipline encourages maintain office facilities	1=Strongly Agree
		-Discipline of work will create conditions conducive work	2=Quite Agree
		-With the kedisip-linan then the job will be done properly	3=Neutral
		-Each employee is given the opportunity for creativity	4=Disagree
		-Working together to provide ease in working	5=Strongly disagree
		-Suitability of the work associated with the target	Likert scale, with a score weights are:
		-Leaders provide a guarantee of job security	1=Strongly Agree
		-The skills possessed affect work performance improvement-wan	2=Quite Agree
		-Promotion of a performance boost employee	3=Neutral
			4=Disagree
			5=Strongly disagree
labor discipline (X ₃)	Awareness and willingness of a person to obey all company rules and social norms in force as well as aware of the duties and responsibilities		
Employee performance (Y)	The results of the quality and quantity of work accomplished by an employee in performing their duties suits their responsibilities given to him		

2.2 Population and Sample

The population in this study are the employees of the company of PT. Lion Air Batam numbering as many as 50 employees. While the technique of sampling using sampling techniques saturated, where according Sugiyono (2009) when the population of less than 100 people, it can be taken as the amount of the overall sample in this study, given the number of employees 50 people, then the amount can be made as the number of samples in this research.

2.3 Method of Analysis

To prove the hypothesis that has been proposed, then used the method of analysis as follows:

(1) Descriptive analysis is a statistical analysis using descriptive, such as the average and standard deviation. This analysis is used to get a picture of satisfaction, compensation and discipline of work to employees performance at PT. Lion Air in Batam.

(2) Multiple linear regression analysis is an analysis aimed to examine the effect of job satisfaction, compensation and work discipline on employee performance. By using multiple linear regression formula cited of books Mulyono (2006, p. 257).

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where:

Y=employee performance

X1=Job satisfaction

X2=Compensation

X3=Discipline work

b1, b2, b3=Regression coefficients to be observed

(3) Partial test (t_{test}) for the first hypothesis testing

This test is to determine whether the effect of each the independent variable on the dependent variable is meaningful or not. Testing is done by comparing the tcount each independent variable with a value t_{tabel} with a degree of error of 5% in terms of ($\alpha=0.05$). If $t_{count} \geq t_{tabel}$, then the independent variables significantly influence the dependent variable.

(4) Test unison (Test F) for the second hypothesis testing

This test is used to determine whether all the independent variables jointly have a significant effect on the dependent variable. Testing is done by comparing the F_{value} of with F_{table} on the degree of error of 5% in terms of ($\alpha=0.05$). If the $F_{\text{value}} \geq F_{\text{table}}$, it means that the independent variables together give a significant effect on the dependent variable or the first hypothesis that can be accepted.

(5) The reliability test was used to test the reliability of grain research instruments, testing the reliability of the grain instrument reliable study if Cronbach alpha values above 0.60.

3. Results Analysis

3.1 Description Characteristics of Respondents

This study aims to determine the extent of the influence of satisfaction, compensation and discipline on the performance of employees at PT. Lion Air in Batam. To work on employee performance and to analyze the most dominant variable that facilitates the research process, it needs to be supported by the determination of the identity of respondents, where respondents in this study were employees and an employee at PT. Lion Air Batam numbering as many as 50 people. Then how sampling is done by using a saturated or census sampling method. Where the sample is determined by taking the total number of population.

3.1.1 Characteristics of Respondents by Gender

In a company or organization, often gender becomes an obstacle because of the differences in perspective between men and women. Grouping of respondents in this study is intended to determine the level of grouping gender proportion of male and female, which can be viewed through the following Table 2.

Table 2. Characteristics of respondents by gender

No.	Category	number of Respondents	Percentage (%)
1.	Man	24	48,0
2.	Women	26	52,0
		50	100,0

Source: The results of primary data processing, 2014.

According to Table 2 the characteristics of respondents by gender, shows that the level of the proportion of respondents by sex is the greatest in this study were women with a number of respondents as many as 26 people (52%) and men as many as 24 people (48%), so it can be said that most great employees at PT. Lion Air in Batam are women.

3.1.2 Characteristics of Respondents by Age

Characteristics of respondents in this study can be classified on the respondents aged under 25 years, 26-35 years, 36-45 years and over 46 years of age, for the complete results can be presented through the following Table 3.

Table 3. Characteristics of respondents by age

No.	Category	number of Respondents	Percentage (%)
1.	<25 year	3	6,0
2.	26-35 year	22	44,0
3.	36-45 year	20	40,0
4.	Above 46 year	5	10,0
		50	100,0

Source: The results of primary data processing, 2014.

The above table that the description of respondents by age, where the largest age group of respondents in this study were respondents aged between 26-35 years that as many as 22 people (44%), followed by respondents aged between 36-45 years with the number of respondents was 20 people (40%), so it can be concluded that the average employee at PT. Lion Air in Batam is aged between 26-35 years.

3.1.3 Characteristics of Respondents by Type of Education

Descriptions in this study, illustrates the kind of education last held by the employee, where the employee last type of education can be grouped into four groups, namely: high school, college, Bachelor's, and Master's degree. The description of the respondents according to the type of recent education can be seen in the following table.

Table 4. Characteristics of respondents by type of education

No.	Category	number of Respondents	Percentage (%)
1.	SMA	1	2,0
2.	Academy	10	20,0
3.	Bachelor	34	68,0
4.	Postgraduate	5	10,0
		50	100,0

Source: The results of primary data processing, 2014.

Based on the above table that outlines the description of the respondents according to the type of education, so that education can be said that the last respondent is the largest undergraduate (S1), which is as many as 34 people or 68%, so it can be concluded that the average type of education of employees at PT. Lion Air in Batam is Bachelor.

3.1.4 Characteristics of Respondents by Length of Work

Characteristics of respondents by length of work outlines the employment period or devotion to one respondent to the company where he worked, for more details will be presented the characteristics of respondents by length of work that can be viewed through the following table.

Table 5. Characteristics of respondents by duration of work

No.	Category	number of Respondents	Percentage (%)
1	1-5 year	3	6,0
2	5-10 year	21	42,0
3	Above 10 year	26	52,0
		50	100,0

Source: The results of primary data processing, 2014.

From the above data, it appears that the largest tenure respondents in this study were over 10 years that as many as 26 people or 52%, so it can be concluded that the average employee working at PT. Lion Air in Batam is have a service life over 10 years.

3.1.5 Characteristics of Respondents by Marital Status

Description of the identity of respondents by marital status shows whether the employee is married or not, for more details the characteristics of respondents by marital status in this study can be seen in the following Table 6.

Table 6. Characteristics of respondents by marital status

No.	Category	number of Respondents	Percentage (%)
1.	marry	42	84,0
2.	single	8	16,0
		50	100,0

Source: The results of primary data processing, 2014.

The above table shows that the frequency distribution of respondents by marital status in this study are dominated by respondents with marital status is as many as 42 people or 84%, this means that most employees at PT. Lion Air in Batam is already married.

3.2 Testing Instrument Data

3.2.1 Test Validity

Test the validity of a list of questions to gauge whether or not a legitimate or valid questionnaires. A questionnaire considered valid if the questions on the questionnaire were able to consider something that is measured by the questionnaire method is to use corrected item-total correlation is done by correlating each item score with the total scor and perform correlation with correlation coefficient values over estimate. This is because in order to avoid the total item coefficient over estimate. In determining whether or not an item to be used is usually done significant test. Therefore, according to Dwi (2010, p. 90) that an item is considered valid if the following significant test correlation coefficient of 0.05, more Dwi suggested that an item is considered valid if the value of the correlation above 0.30. Thus, the validity of test results can be presented on job satisfaction, compensation and working discipline by using SPSS release 17 that can be seen in the table is as follows.

Table 7. Validity of test results job satisfaction

code Questions	Corrected Item Total Correlation	R standard	Conclusion
X11	0,350	0,30	Valid
X12	0,486	0,30	Valid
X13	0,524	0,30	Valid
X14	0,476	0,30	Valid
X15	0,390	0,30	Valid

Source: Data processed, 2014.

Table 7 which is the result of testing the validity of job satisfaction, the statement of 5 items tested turned out to be all the item in question is valid, for the fifth statement items have correlation values that have been on top of 0.30.

Then the validity of the test results will be presented on the compensation that can be viewed through the following Table 8.

Table 8. Validity of test results compensation

code Questions	Corrected Item Total Correlation	R standard	Conclusion
X21	0,360	0,30	Valid
X22	0,534	0,30	Valid
X23	0,380	0,30	Valid
X24	0,353	0,30	Valid
X25	0,438	0,30	Valid

Source: Data processed, 2014.

Table 9 which is the result of testing the validity of compensation, the statement of 5 items tested turned out to be all the item in question is valid, for the fifth statement items have correlation values that have been on top of 0.30. Then it will be presented the results of testing the validity of the discipline of work which can be seen through the following.

Table 9. Work discipline validity of test results

code Questions	Corrected Item Total Correlation	R standard	Conclusion
X31	0,618	0,30	Valid
X32	0,680	0,30	Valid
X33	0,747	0,30	Valid
X34	0,698	0,30	Valid

Source: Data processed, 2014.

Based on the validity of the test results on the discipline of work, then the statement of the four items were tested, it appears that the four items of the statement is valid or invalid because it has corrected item total correlation values above of 0.30. Furthermore, the validity of the test results will be presented on the employee's performance can be viewed through the following.

Table 10. Validity of test results employee performance

code Questions	Corrected Item Total Correlation	R standard	Conclusion
Y1	0,302	0,30	Valid
Y2	0,513	0,30	Valid
Y3	0,586	0,30	Valid
Y4	0,601	0,30	Valid
Y5	0,557	0,30	Valid
Y6	0,584	0,30	Valid

Source: Data processed, 2014.

Based on the validity of the test results on the performance of employees with 6 items proposed statement, it is seen that the sixth item of the statement is valid or invalid because it has corrected item total correlation values above of 0.30.

3.2.2 Test Reliability

In this study, the authors use the questionnaire as a measure of the influence of satisfaction, compensation and discipline of work to employees performance at PT. Lion Air in Batam. Test Reliability is a reliability test aims to determine how far the measuring instrument can be trusted. A questionnaire said to be reliable or reliable if someone answers to the question of constant or stable over time.

Reliability testing will construct in this study using Cronbach's alpha values generated through SPSS data processing. If the value of Cronbach's alpha > 0.60 then said to be reliable (Ghozali, 2001). Reliability testing results can be seen in the following.

Table 11. Reliability test results

Research variable	Cronbach's Alpha	R standard	Information
Job satisfaction	0,684	0,60	reliable
Compensation	0,653	0,60	reliable
labor discipline	0,847	0,60	reliable
Employee performance	0,765	0,60	reliable

Source: Appendix SPSS.

From Table 11 reliability test results on the variables satisfaction, compensation and working discipline with the performance of employees at PT. Lion Air Batam shows all items of questions all reliable because it has a value of Cronbach's alpha (α) above 0.60, which can be specified for job satisfaction variables with Cronbach's alpha of 0.684, compensation to the value of Cronbach's alpha (α) of 0.653, labor discipline with cronbach's alpha of 0.847, and the performance of employees with a value of cronbach's alpha (α) of 0.765, so it can be said that the four variables have been reliable or reliable because it has a value of 0.60 r standar above.

Analysis and Discussion Influence Satisfaction, Compensation and Discipline of work the Employee Performance

Based on test results regarding quality test data from each research tool, it can be done multiple linear regression analysis on the effect of satisfaction, compensation and work discipline on the performance of employees, which in testing in this study used multiple linear regression analysis (multiplier regression), using SPSS release 17 that can be seen in the following Table 12.

Table 12. Processed data regression using SPSS program version 17

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.584	.303		1.926	.060
	Job satisfaction	.352	.106	.408	3.325	.002
	Compensation	.317	.094	.306	3.379	.001
	Work discipline	.255	.100	.289	2.542	.014

a. Dependent Variable: Employee Performance

According to the Table 12 regression data that is processed by using SPSS release 17 then the regression equation ie:

$$Y=0,584b_0+0,352X_1+0,317X_2+0,255X_3$$

From the results of the regression equation above, it can be given the explanation that:

$b_0=0.584$ which is a constant value, meaning that if the job satisfaction (X_1), compensation (X_2) and discipline (X_3) constant, then the employee performance (Y) amounted to 0.584%.

$b_1=0.352$ which shows the regression coefficients satisfaction work (X_1), meaning that if the job satisfaction increases, the influence on the performance of employees will increase by 0.352%.

$b_2=0.317$ which is the regression coefficient of variable compensation, meaning that when compensation is improved it will affect employee performance improvement amounting to 0.317%.

$b_3=0.255$ which is the regression coefficient of work discipline, meaning that if the labor discipline increases will affect employee performance amounted to 0.255%.

Then it will be presented the results of multiple correlation analysis that can be viewed through the following Table 13.

Table 13. Correlation analysis results

	R	R Square	Adjusted R Square	Std. Error of the Estimate	F _{count}	Sign
1	.865 ^a	.747	.731	.206090,000	45.374	0,000 ^a

Source: Appendix SPSS.

According to the Table 13 which is the result of multiple correlation analysis of the obtained figures R of 0.865, this shows that satisfaction, compensation, discipline, work has a significant relationship with employee performance, because the value of R positive and close to 1. Then the value of R² (R-square) of 0,747 (74.70%), this shows that the percentage of the influence of the independent variables (job satisfaction, compensation and working discipline) able to explain amounted to 74.70% of the variation of the variable employee performance.

The standard error of the estimated error is a measure of the amount of regression models in predicting employee performance (Y). From the results of the regression analysis of the obtained value of the estimated standard error of 0.206. This indicates that the number of errors in predicting employee performance can be determined at 0.206.

3.3 Hypothesis Testing

3.3.1 Partial Test (T-test)

To test the extent of influence of each variable that job satisfaction, compensation and work discipline on the performance of employees then used the significant test, by comparing t_{count} and t_{table} of each variable that job satisfaction, compensation and discipline of work which can be described as follows:

a) Effect of Job Satisfaction (X1) on employee performance (Y)

From the results of the regression coefficients obtained by regression coefficient of 0.352, but it has t_{count} for job satisfaction at 3.325 and 1.679 t_{table} , and has a value of probability of $0,002 < \alpha < 0.05$. Because t_{count} greater than t_{table} and has a probability value smaller than the standard value, it can be said that job satisfaction has a significant influence on improving the performance of employees at PT. Lion Air in Batam.

b) Variable Compensation (X2) on employee performance (Y)

Based on the data processing result of regression showed that the value of the regression coefficients for compensation of 0.317, and has t_{count} 3.379 > 1.679 t_{table} and in addition it has a probability value $0,001 < \alpha < 0.05$. This means that the compensation has a significant influence on the performance of employees at PT. Lion Air Batam.

c) Variable Work Discipline (X3) on the performance of employees

Based on the results of data processing showed regression coefficient regression value for the working discipline at .255, and has t_{count} 2,542 > 1,679 t_{table} and besides it has a probability value $0,014 < \alpha < 0.05$. It can be concluded that the discipline of work has a significant influence on improving the performance of employees at PT. Lion Air in Batam.

3.3.2 Simultaneously Test (Test F)

To be able to prove that the job satisfaction, compensation and working discipline has a simultaneous effect on employee performance or simultaneously, it can be used by F_{test} . In Anova obtained of F_{value} (45.374 > 2.807) and in addition it has a probability value $< \alpha$ (0.000 < 0.005), it can be said that the regression model can be used to predict the performance of employees.

4. Conclusions

The conclusions of the research and discussion about the influence of satisfaction, compensation and discipline of work to employees performance at PT. Lion Air in Batam, then a number of conclusions as follows:

(1) Effect between variables (job satisfaction, compensation and working discipline) with the performance of employees at PT. Lion Air Batam there was a strong and significant influence, because the higher job satisfaction, compensation and working discipline, the higher the employee's performance because it has a probability value of less than 0.05. Thus, in this study proved the first hypothesis.

(2) The most dominant variable affecting the performance of employees is job satisfaction, reasons for job satisfaction has a standardized coefficient of the largest value when compared to variable compensation and work discipline.

5. Suggestions

Based on the conclusions that have been described, it can be presented several suggestions as recommendation to the company PT. Lion Air in Batam is as follows:

(1) To provide satisfaction for employees, it should PT. Lion Air attention to the issue positions and working conditions of the company to provide satisfaction for employees.

(2) It is recommended that the need for the company given notice regarding the salaries, besides that bonuses are given in a timely manner.

(3) It is recommended that companies need to increase the level of discipline, by imposing sanctions or penalties for employees who break the rules.

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Sustainable Tourism Management by Using Recreational Carrying Capacity Concept (Case: Mesr Desert in Iran)

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Abstract

Deserts have a variety of potentials in ecotourism where comprehensive planning can lead to the sustainable development of the desert. Carrying capacity can have different partial definitions, especially depending on the economic, social and environmental dimensions. The set of these types of capacities can constitute the tourism carrying capacity. One of the distinguished deserts in Iran is Mesr, located in Isfahan province. The objective of this paper is to identify the optimum number of eco-tourists visiting Mesr desert, for the achievement of sustainable development in this area, based on the desert ecological potentials. Therefore organising and planning these potentials could raise the economical growth of the region. The carrying capacity of the area is assessed by using the methodology suggested by the IUCN. The capacities are assessed in three levels. With respect to these capacities in the planning process, the environmental damages prevent in the region and provide easy options for eco-tourism. It is necessary to survey the damaging factors that make the color of the sand to fade. After sampling of septic and non-septic sand, the outcome shows remarkable effect of insecticides on sand pigment. This implies more control on accommodation conditions.

Keywords: sustainable development, desert tourism, sand pigment, carrying capacity

1. Introduction

The concept of carrying capacity is one of the key principles of sustainable tourism (Barrow, 2007). Finding convincing or widely agreed approaches to estimates and models for carrying capacity, especially for human population, is difficult (Cohen, 1995).

Ecologists define carrying capacity as the population of a given species that can be supported indefinitely in a given habitat without permanently damaging the ecosystem upon which it depends (E. Rees, 1992).

The concept of carrying capacity is very old in wildlife management, and was used for the first time by Dasmann in 1945 for assessing the capacity of the forests for grazing by animals (Wall, 1983). It was from early 1960s that this concept was applied in recreational research for the purpose of determining the ecological disturbance from man use (Lucas, 1964).

That carrying capacity would gain prominence in outdoor recreation management is logical enough. Many managers are trained in the biological sciences, therefore, are familiar with the concept as it had been applied to management of wildlife and livestock (Dasmann, 1964). Tourism carrying capacity evaluation has recently become an important issue for sustainable tourism development (Trumbic, 2005). Thus the concept of carrying capacity of tourism area is based on a theory that a tourism area will be waned. In other words, big number of tourists can destroy bases of a tourism attraction (Getz, 1983; Cooke, 1982).

Carrying capacities in nature are not fixed, static, or simple relations. They are contingent on technology, preferences, and the structure of production and consumption (Arrow, 1996). Therefore, analyzing carrying capacity is a tool planning which can determine the development level and the quantity of tourists.

Carrying capacity is a major concept which includes physical, social and environmental impacts. It is often observed that tourism generates a negative impact on the environment of destination places, among which the depletion of the natural capital is the most evident (Kurahde, 2013; Nghi, 2007). The indicator of Tourism Carrying Capacity can be particularly relevant to this purpose. In fact, it gives an idea of the threshold of tourists that can be accepted at a destination while considering the capacities of some components of the environmental (Kurahde, 2013).

World Tourism Organization (1993) defines CC as, the level of visitors use in an area accommodating with high levels of satisfaction to visitors and few impacts on resource. Mathieson and Wall (1982) defined it as the maximum number of people who can use a site without an unacceptable decline in the quality of experience gained by visitors (Kurahde, 2013).

2. The Objective

The objective of this study is to identify the optimum number of tourists for the achievement of sustainable development based on the desert potentials. Therefore, organizing and planning such potentials could raise the economical growth of the region.

Today the size of the global park tourism industry is great and on the growth. Most parks and protected areas need visitor management to enhance values, specifically when tourism becomes an integral component of the park (Eagles & McCool, 2002). Therefore, a comprehensive park planning and management approach should define the optimum capacity for visitors in order to provide the desired biophysical and social conditions. The capacity of a park varies depending upon the place, season, time, visitor behavior, facility design, patterns and management level, and the dynamic characteristics of the environmental elements (Ceballos-Lascuráin, 1996).

Many studies are conducted concerning different aspects of the carrying capacity for National Parks and protected areas or some areas with ecological value (Papageorgiou & Brotherton, 1999; Leujak & Ormond, 2007; Sayan & Atik, 2011; Nghi, 2007).

Desert tourism is a kind of echo-tourism with special capabilities in Iran. Desert areas in Iran with high level of temperature (in Lout desert 65°C (Kardavani, 2009), hotter than Nevada and Africa desert) are unique places for Sun tourism and sand-therapy. With respect to the fact that the Ozone layer over Iran is not faded, the sun rays here have therapeutic advantages (Armaghan, 2008). In addition this region is sustainable for night tourism astronomy. The Mesr desert is a tourist attraction among the many in Iran. The sand type here is of Quartz with a variety of colors constituting the habitat of deferent insects unique to this region.

In this context, the concept of carrying capacity is often presented as a particularly useful approach for determining the intensity of tourism development in the region. An increase in the number of tour packages has made the area under study to be one of priorities in tourism on Iran. Therefore, a survey deems necessary to determine the tourism effect on the environmental aspect of this region.

According to the reviews made in this respect, no study is conducted on sand pigment change. Therefore, a reference is made to the corresponding author's MS dissertation (2009) and her article (2010). Heavy population of insects, the habitants of the area, make tourist use insecticides. The chemical interaction of the insecticide with the sand effect the sand pigment (see Table 1). It is obvious that in due time, if this trend continues, that is in the short future the colorful sand beds will became discolored, hence, loss of an ecotourism attraction point. This claim on discoloration of sand is supported through X Ray Diffraction (XRD) analysis (see Sec.4).

3. Introduction of the Study Area

Mesr desert is located in Khour-o-Biyabanak area near Naenin, in north-east of Esfahan Province with a 34°4' latitude and 54°47' altitude coordinate (see Figure 1).

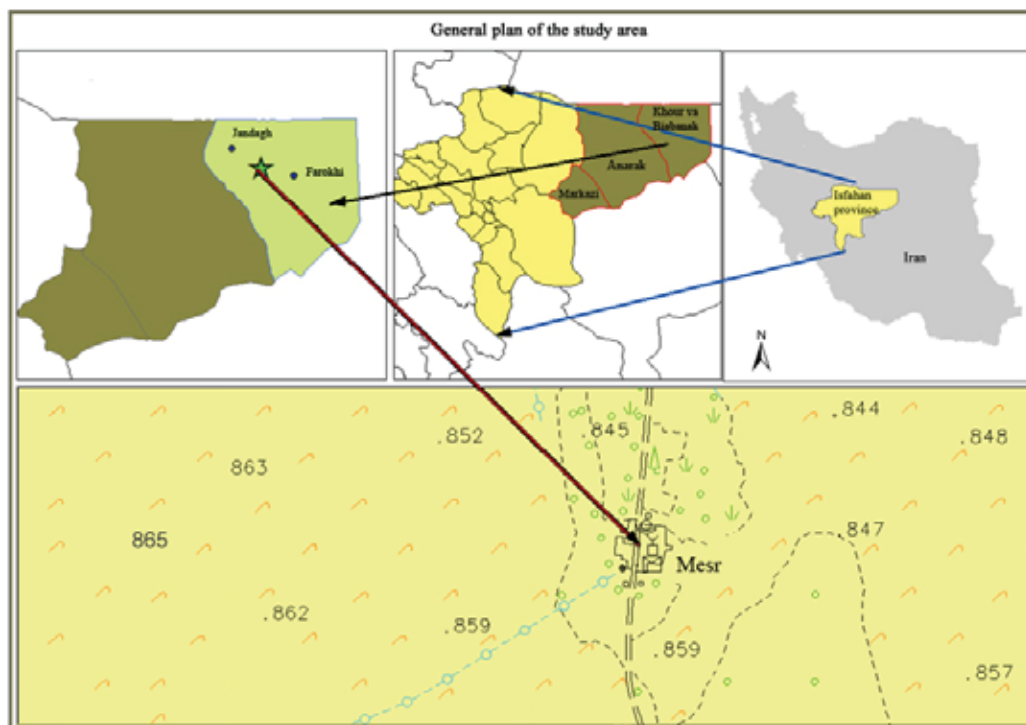


Figure1. General plan of the study area

This desert is endowed with colorful sand dunes indicating the unique feature of the geomorphology of the area. Due to its dry and arid climate the plantation species are limited, to name a few: Grass (*Poaceae*), *Calligonum comosum*, *Tamarix sp.*, *Haloxydon persicum* (Esfahan Natural Resources Organization, 1998).

Regarding the animal life in the area the following list is provided by the Agriculture—Jahad Organization of Khour (2006); Birds: *Ammoperdix griseogularis*, *Perdicinae sp.*, *Aquila sp.*, *Podoces sp.*, *Passeridae.n.*; Reptiles: *Ophidian.n.*, Venomous snake, *Echiruroida*, *Schis carinatus*.

Others: *Felis silvestris*, *Varanidae sp.*, *Canidae*, *Gazelle*, *Capra aegagrus*, *Leporidae.n.*

Note: The *Acinonyx jubatus venaticus* and *Equus hemionus* are extinct. The direction of the dominant slope is southern (Esfahan Natural Resources Organization, 1998). There are special potentials in desert tourism. About 25,000 tourists visit the area a year which varies in different seasons because of unbearable heat in summer time and sandy days for 45 days (Tourism Organization of Iran, 2014).

4. Research Method

The concept of ecotourism carrying capacity in this case desert tourism activities can be explained on the basis of the following interrelated elements: (1) The amount of use of a given kind, (2) a particular environment can endure, (3) over time, (4) without degradation of its sustainability for that use (Fennel, 1999). The annual visits, geographical, bio-physical, ecological, and managerial characteristics of the site were investigated. Physical, real, and effective carrying capacities were suggested by the IUCN (Ceballos-Lascuráin, 1996).

5. Results

Geo-chemistry analyses assessed tourism damages to the area along with using carrying capacity method to identify tourist acceptability. Therefore carrying capacity of Mesr desert was measured. Tourism damages to the area were sampled which follows in the second section of the results. Then threatening damages were surveyed in quantities and different aspects.

5.1 Physical Carrying Capacity

The Physical Carrying capacity is the maximum number of tourists who can visit a place at a specific time. In other words, it is a maximum capacity that can place visitors without any limits.

Carrying formula is as follow:

$$PCC = A \times V/A \times RF$$

A (Area)=using area for visitors

V/A (Visitors/Area)=the number of visitors in km²

RF (Rotation Factor)=time average of visiting in a days

V/A=a space that a visitor needs to be comfortable and move easily a dependent variable of the area. In this research the space is 10 km²/person.

RF=the number of visits made during the visiting period divided by average time for a visit.

A=750 km² (The total area is a 50×15 km rectangular)

V/A=1/10

RF=24/24

$$PCC = A \times V/A \times RF$$

Which gives

$$PCC = 750 \times 1/10 \times 24/24$$

PCC=75 persons/a day

Real Carrying capacity: In order to compute the RCC, the corrective factors (CF is existing limit in percent) computed through:

$$RCC = PCC - Cf_1 - Cf_2 - \dots - Cf_n$$

$$Cf = M_1/M_2 \times 100$$

M₁=The amount limitation of a factor

M₂=Total amount of a factor

$$RCC = PCC \times (100 - Cf_1)/100 \times (100 - Cf_2)/100 \times \dots \times (100 - Cf_n)/100$$

At this stage to identify the amount of area limitation which is its properties, are reduced from physical capacity:

Limits of the stormy days

Based on Khour climatology station, there are 45 stormy days from March to April.

$$Cf_1 = 45/365 \times 100$$

Cf₁=% 12

Limits of the hottest days

Based on Khour climatology station, there are 130 very hot days from June to September.

$$Cf_2 = 130/365 \times 100$$

Cf₂=%35

Therefore, the calculation of the RCC is as follows:

$$RCC = 75 \times (100 - 12)/100 \times (100 - 35)/100$$

$$RCC = 75 \times 0.85 \times 0.65 = 44 \text{ persons/a days}$$

Effective capacity: The ability to manage a place with maximum number of visitors with respect to sustainability is the effective carrying capacity. Management abilities include a set of conditions necessary to achieve desirable objectives. There are different variables such as policies, strategies, rules and regulations, and human resources in assessing the abilities quantitatively. Lack of management abilities is the most common problem in tourism in developing countries. It is worth mentioning that the effective carrying capacity is not bigger than real carrying capacity, but there is a chance to improve real carrying capacity with effective management abilities (Farhoudi & Shourjeh, 2005).

5.2 The Importance of Carrying Capacity for Given Environmental Protection

The magical attraction of the Mesr desert is disturbed by insects. This desert has many visitors and they have to use insecticides to be protected from the native insects (Figure 2). The study run on this region revealed the amount of the empty can or plastic insecticides containers. Through amore in depth study the sand color change became obvious. Six sand samples are collected from the study area and analyzed.



Figure 2. Insecticide in desert by tourists

Note. 1 and 2. Non septic sample. 3 and 4. Septic sample.

The six sand samples are analyzed by XRD (X-Ray Diffractometer, Brucker, D8ADVANCE, Germany, X-Ray) in Esfahan University central lab. Non-septic sand (samples; 22B, K, L, B3) are compared to septic sand (samples; B2, 23C) and the results are tabulated in Table 1.

There are remarkable mineralogical changes in septic sample (23C) compared with non-septic sample (22B). 21.7% Decrease of Quartz level in septic sample (23C) in comparison with 10.1% increase in Calcite mineral and also 10.6% increase in Albite mineral is due to exposure to insecticide. It is also observed that the septic sample (B2) with 21.3% decrease of Quartz and 25.8% increase of Calcite mineral of non-septic sample (B3) prevail, see Table 1.

Table 1. Results of XRD analysis of septic and non-septic sand in Mesr desert

Mineral Name	Formula	Sample 23 C (Septic)	Sample 22 B (Non-septic)	Sample K (Non-septic)	Sample L (Non-septic)	Sample B2 (septic)	Sample B3 (Non-septic)
Quartz, syn	SiO ₂	45.4%	66.1%	54%	59.3%	36.6%	57.9%
Calcite, syn	CaCO ₃	26%	15.9%	27.7%	28.7%	52.8%	27%
Albite, calcian, ordered	NaAlSi ₃ O ₈	28.6%	18%	18.3%	12%	10.7%	11.2%

The sample of 22B to 23C and also sample of B3 to B2 changed after contaminated by insecticides. The samples K & L are non-contaminated.

Insecticides or (Pyrethroid insecticides) contain insoluble Alkaline (Darab et al., 2010). In this study it is found that the chemical component active in discoloration consist of the following two essential ingredients which dissolve Quartz:

- (1) Enduring toxic ingredient.
- (2) Alkaline substance that reduces and changes the chemical properties of sand of Quartz.

6. Discussion

There is a significant effect to the area from number of visitors per a period of time, in the other word, more visitors bring more damages. From another aspect there are also more threats when visitors leave insecticide in the area. Geo-Chemise analyses in the section two show major damages to the environment. Chemical substances destroy quartz sand which is the hardest one. This amount of chemical activity in long term demolish sands combination and the view of the area as well.

7. Conclusion

Calculation of the carrying capacity of the area is made in order to achieve sustainable development objectives in tourism. Carrying capacity is a big contribution in preventing the biological damages to the environment. To determine number of visitors, the average usage of sites are surveyed in physical, real, effective levels.

According to the findings indicating the real carrying capacity of 44 no harm would threaten this desert if the insecticides consumption is controlled.

The results obtained from XRD analyzed and the tests run on chemical properties of both the septic and non-septic samples proved that insecticides are the main threat for windy sands.

Non-observance of carrying capacity in this area of ecotourism causes the problems mentioned above. Proper management in ecotourism will promote the enjoyment and secure the sustainability of the environment.

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Investigating the Relationship between Brand Equity, Brand Loyalty and Customer's Satisfaction (Case Study: Restaurants in Rasht City)

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Abstract

The aim of this study was to investigate the relationship between brand equity, customer's satisfaction and brand loyalty. The study was a descriptive and in term of purpose is applied and in term of data collection will also be considered field. Data collection tool was questionnaire consisting of 21 questions to measure the research variables. The validity by professors and experts and its reliability by using Cronbach's alpha was reviewed and approved. The study population consisted of students at Islamic Azad University who were customers of restaurants and fast food in Rasht city. Using the Cochran formula final study sample 420 subjects was studied. In order to test the hypothesis structural equation modeling was used. The results showed that brand equity has a significant relationship with rate of 0.18 with a customer's satisfaction. As well as customer's satisfaction is related to customer's loyalty with rate of 0.88. Among the aspects brand equity as ideal inner satisfaction has the highest correlation with customer's satisfaction.

Keywords: brand equity, customer's satisfaction, customer's loyalty, restaurants, fast food

1. Introduction

The aim of marketing is demand management through pushing customer as far as maturity in loyalty ladder of organizations. Today customer's satisfaction is not sufficient and companies, organizations and banks should not be satisfied by customer's satisfaction. They should ensure that their satisfied customers are loyal as well. In this paradigm aims to establish long-term and interactional relationships with stakeholders and, most importantly, maintain customer is so that maintain more customers and lost fewer customers and long-term benefits resulted, thus increases market share and profitability. Organizations today due to more intensive competition, the development of information technology and knowledge of their customers are looking for loyal customers. These factors have created a situation merely by goods high price or quality cannot be achieved long-term success in the market. Today, managers have had to the fact that customer as a critical factor for the success of an organization attract new customers and retain existing customers will be more costly, in fact, the best customers are loyal to the company. In general, it can be said most large enterprises today strive to develop customer loyalty and as it is considered a strategic objective for themselves (Shojaee, 2010).

The importance of the customer is the extent that the cost of attracting a new customer is between 5 to 11 times maintaining an old customer or two percent increase in customers, reduce costs by ten percent. The most valuable asset of any organization is customer's trust and confidence. Get a loyal and permanent customer only is condition for continued and continuity survival of efficient activities of any company. The growing trend of developing products and competitors indicates that there is no such thing as a shortage of products but in fact, what it is, a lack of customers. This is what caused the increasing importance of the customer (Tajzadeh et al., 2010). Restaurant and food service industry to customer is vulnerable industries because the quality of medical services is customer. Therefore, the discovery of criteria and factors influencing customer's loyalty is important for executives in the industry and researchers are interested in research in this area.

2. The Review of the Literature

Customer satisfaction is undoubtedly one of the strategic issues in recent decades. Now, the global economy, lead to survival of firm's customers, enterprises can no longer be indifferent to the expectations and demands of customers, they have all their activities and their abilities to realize customer satisfaction, because it is the only source of return on investment for customers. The first principle in the business world today is customer-friendly value creation (Hill et al., 2009). Managers in manufacturing and service institutions in all public, private and cooperative sections gradually realize that not only product quality, distinguishing them from others, but, the focus should be shifted from marketing to customer orientation. Many of them not only have focused all their attention to the customer market but also retain existing customers as a strategy of cheaper, easier and perhaps profitable and more attractive (Horwitz, 2001).

According to research by Cutler (2005), Kotler and Keller (2006), the relationship between customer's satisfaction and customer's loyalty is very sensitive and important. Because when a customer is dissatisfied, distanced company and in relation to the product or service, tell bad story to other. However, when the customer is satisfied, repeatedly it will buy the product and about product will provide positive comments to others. The volume or frequency of repurchase and recommend the product by him to others were measured (Budiarti et al., 2013).

Over the past two decades, all types of organizations increasingly have understood the importance of customer satisfaction and loyalty. The main reason for the strong emphasis on customer satisfaction is that the organizations increase customer satisfaction, it can be stronger competitive position and increase the market share and market and take profits, reduce cost of goods and services, reduce risk and reduce the cost of attracting new customers is other results of customer satisfaction and loyalty. Customer satisfaction can be defined in different ways. Evaluation by the customer after the purchase of goods and services is a shopping satisfaction. In general, researchers believe that the customer satisfaction is determinant of repurchase, customer oral advertising and, ultimately, customer loyalty. Satisfaction is the determinants of customer loyalty have been a long time. Satisfied customers will return and repurchase or will use the service company next time. This category of customers will exchange their positive and negative experiences of company's goods and services (Bayraktar et al., 2012).

Some researchers believed loyalty is the ultimate factor of customer satisfaction model. Loyalty by the intention to buy, bear the price of goods and services from customers and also offer goods and services to others are measured. It is thought that the idea of better and more satisfied customers of a company or organization must increase their loyalty (Bayraktar et al., 2012).

Customer's loyalty is a deep-seated commitment to repurchase or reuse of a product or service. Despite these effects, positioning, and marketing recommendations potentially on changing customer behavior are not influenced. The most common definition of loyalty is offered by Oliver and he defined loyalty as having a deep commitment to preferred product or service that buying continuous and consistent in the future occurred. Also it lead to repeat purchases of a specific brand or set of brands is determined and while there is position or efforts to replace or modify his behavior in outdoor (Tajzadeh et al., 2010). There is many definition and scope of customer loyalty. According to Majumdar's view, consumer loyalty is a complex concept and since it is multi-dimensional and complex loyalty and it has still not provided a single definition, but in general, researchers believe that loyalty can be examined from two attitudinal and behavioral dimensions (Shojae, 2010).

Since this study is to investigate loyalty to the service, in the following definitions of loyalty to the service provided. Sander believes that service loyalty is more complicated than brand loyalty that normally used for goods. In his view, service loyalty necessarily not match with other forms of loyalty, loyalty to brand, service loyalty, store loyalty or loyalty to suppliers. Schneider argues that loyalty to the service, is strict criteria compared to other items loyalty and a loyal customer to service should be brand loyalty and faithful loyal to place. Loyalty in this area can be attended service or provider. Also services has intangibility features, heterogeneity and simultaneity of production and consumption, this adds to the complexity of this kind of loyalty (Fooladvand et al., 2013). Brand equity means marketing and financial values related to brand power in the market included real estate dedicated to a brand, brand awareness, brand loyalty, perceived quality of the brand. According to Lassr, Mittal and Aaron (1995), literature, brand equity is evaluated from two different perspectives: financial perspective and customer perspective. The financial perspective usually refers to a company's brand value in the market. While the customer's perspective, brand equity based on brand value perceived by the customer is evaluated (Severi & ling, 2013). Brand equity is a broader perception of the brand. However, brand loyalty from the past means having a positive attitude towards buying a particular brand. The

brand equity of attitude does not lead necessarily to buy. Brand equity consists of 5 sections which include: 1) perceived quality; 2) employee behavior; 3) concept of an ideal; 4) brand identity; 5) lifestyle cohesion (Nam et al., 2011). Aaker (1996), brand equity as a set of related assets defines a brand name and emblem the value provided by a product or service for the company and the customer is added or subtracted (Juntunen et al., 2011). Perceived quality is the customer's perception of the overall quality or superiority of a product or service to the customer's desire to replace it. To understand the perceived quality, identify and measure critical dimensions it would be useful, but perceived quality itself is a summary structures. Brand associated by customer's perceived quality, the perception only show the overall quality and essentially based on customer knowledge is not about minor features (Pike et al., 2010). Employee behavior is other elements of brand equity. The employee behavior is sales staff or service providers create a mentality in consumers. The researchers because of the importance of employee behavior, brand equity are part of this section (Nam et al., 2011).

Ideal inner satisfaction can be generally as thinking and how people feels about something or somebody. The ideal concept of the degree of customer activity and thinking it is said that he thought the brand accordingly. Ideal theory states that people will buy a brand personality to promote self-actualization (Nam et al., 2011).

Brand identity, organizational theories of individuals is part of a social group and improves their sense of identity and belonging. Similarly, customer shows their social identity with the use of a brand or participating in the purchase. Customers give a positive value to brands that have a good reputation among the groups in which they belong. Therefore, brand identity allows people to improve their social character (Nam et al., 2011).

Consistency in lifestyle, lifestyle is including not only demographic characteristics but also a positive attitude to life, opinions and attitudes of people as well. Although there is no full complement of life-style, but the term is widely used to pattern the lives of individuals, interests and the views of the people who provide it. When customers purchase a brand or a brand that can provide a positive opinion and they reaches a certain pattern of lifestyle needs to solve, so consistency is what brand of lifestyle means it is in accordance with the lifestyle of people. This is contrary to the concept of the ideal brand identity and a personal element is unique and do not depend on social and group norms (Nam et al., 2011).

Researchers believe that the brand equity positively affects customer loyalty, customer satisfaction in this connection plays mediator role. Satisfaction when comes you are able to meet different needs of customers. Satisfaction is a level before customer loyalty. In other words, people are satisfied at the beginning of a particular brand and they express their satisfaction. Then be loyal to it (Nam et al., 2011).

Brand loyalty is created when customers have a positive attitude towards the brand and specific brand in succession and special purchase. In addition, the movement of other brands attracts consumers to resist. The researchers found that when customers are loyal to a particular brand, brand loyalty factor allows consumers continuously buy the products of a particular brand and the movement of other brands attracts consumers to resist. Brand loyalty can be trusted, oral advertising customers and understand their intentions (Loureiro & Miranda, 2011).

The purpose of this study is investigating the effect of brand equity and customer loyalty to the brand in restaurants and fast food in Rasht. This research tries to answer the question of whether brand equity on brand loyalty in restaurants and fast food in Rasht is effective or not? Conceptual model is presented in the figure below.

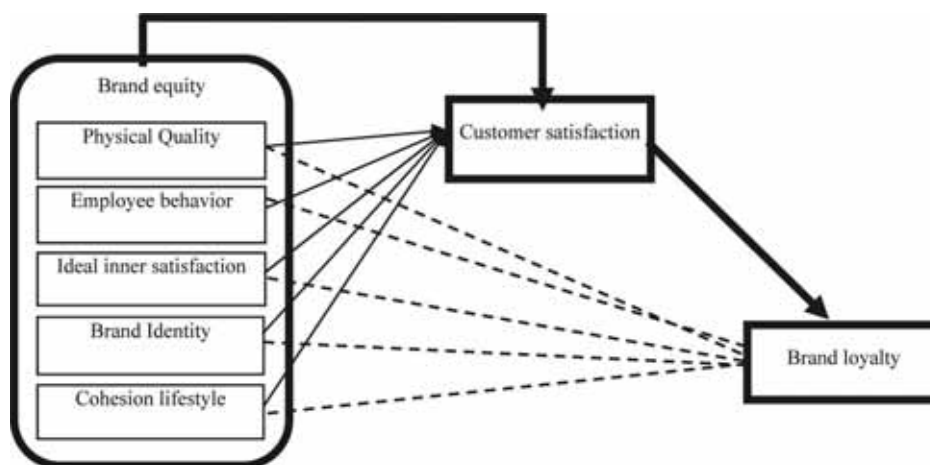


Figure 1. Conceptual model (Nam et al., 2011)

The main hypothesis 1: there is a significant relationship between brand equity and customer satisfaction.

- 1) There is a significant relationship between physical quality and customer satisfaction.
- 2) There is a significant relationship between employee behavior and customer satisfaction.
- 3) There is a significant relationship between ideal and customer satisfaction.
- 4) There is a significant relationship between brand identity and customer satisfaction.
- 5) There is a significant relationship between lifestyle coherence and customer satisfaction.
- 6) Customer satisfaction plays mediator role between physical quality and brand loyalty.
- 7) Customer satisfaction plays mediator role between employee behavior and brand loyalty.
- 8) Customer satisfaction plays mediator role between brand loyalty and ideal concept.
- 9) Customer satisfaction plays mediator role between brand identity and brand loyalty.
- 10) Customer satisfaction plays mediator role between brand loyalty and cohesion lifestyle.

The main hypothesis 2: there is a significant correlation between customer satisfaction and brand loyalty.

3. Methodology

The study was a descriptive-survey research. The study population consisted of students of Islamic Azad University. Study sampling was simple random sampling using Cochran sampling formula sample size was estimated 384. In order to achieve the desired rate of return, the number of 450 questionnaires was distributed among samples, eventually 420 questionnaires were usable. The questionnaire consisted of 21 questions. To measuring brand equity Nam et al. questionnaire contains 16 questions were used. To measuring job satisfaction 2 questions and to measure loyalty 3 questions of Nam et al. used. The reliability of the questionnaire using Cronbach's alpha calculated. Can be seen in the Table 1.

Table 1. Analyses of questionnaire

Variable	Mean	Standard deviation	Number of questions	Cronbach's alpha coefficients
Brand equity	2.9275	0.76278	16	0.944
Physical Quality	2.9089	0.88488	1-4	0.887
Employee behavior	2.9206	0.82493	5-7	0.849
Ideal inner satisfaction	3.0444	0.85836	8-10	0.701

Identity of the restaurant	2.7976	0.88239	11-13	0.770
life style	2.9659	0.86944	14-16	0.753
Customer satisfaction	3.5000	0.68307	17-19	0.765
Customer loyalty	4.1429	0.48931	19-21	0.710

4. Research Findings

4.1 Descriptive Findings

According to the results of summarizing data collected, it can be seen that gender 54.1% (227 persons) of the respondents were male and 45.9 percent (193 people) are female. Age 16.2 percent (n=68) of respondents is less than 20 years, 67.1 percent (282 cases) between 21 to 30 years and 16.7 percent (70 people) over 30 is healthy. A total of 90 patients (21.4%) of Razeghi restaurant as a favorite restaurant, 43 patients (10.2%) of Moharam restaurant, a total of 24 patients (5.7 percent) from Abbas Rashti restaurant, 38 patients (9.1%) of Jahangir restaurants and 225 patients (53.6%) have chosen the other option. A total of 144 patients (34.3%) of fast food Amir pizza, 83 patients (19.8) of fast food Pizria, 76 (18.1) of fast food Barca pizza, 68 patients (16.2%) of fast food Garmoon pizza and 49 patients (11.6%) have used other fast food.

4.2 Testing Hypothesis

The results of Kolmogorov-Smirnov for the main variables showed the significant level obtained for each variable is higher than 0.05, except the ideal inner satisfaction, so the study variables in the sample are normally distributed. The main prerequisite for using structural equation modeling is provided. The present research model was tested using structural equation modeling. The results of the research model fitting indices in Table 2 show the research model with data collected from statistical samples, has suit fitting.

Table 2. Fit indicators of overall model

ROW	Fit Indices	INDEX	Desirable value	Obtained value	result
1	chi-square/df	χ^2/df	3>	2.09	Good
2	Root Mean Squared Error of Approximation	RMSEA	0.08>	0.056	Very good
3	normed fit index	NFI	0.9<	0.98	Very good
4	Tucker-Lewis Index	TLI	0.9<	0.98	Very good
5	Comparative Fit Index	CFI	0.9<	0.99	Very good
6	goodness-of-fit index	GFI	0.9<	0.97	Very good
7	Adjusted goodness-of-fit index	AGFI	0.8<	0.94	Very good

4.2.1 Direct Effects

In Table 3, all hypotheses are based on the existing direct routes as well as significant numbers and t shown significant coefficients and accordingly to approve or reject assumptions, necessary checks carried out.

Table 3. Studied direct routes

Hypothesis	Direction	Beta	T statistic	Results of hypothesis
Main1	Brand equity to customer satisfaction	0.18	3.21	Confirmation
Main2	Customer satisfaction to brand loyalty	0.88	5.61	Confirmation
1	Physical quality to customer satisfaction	0.23	2.66	Confirmation
2	Employee behavior to customer satisfaction	0.24	3.37	Confirmation
3	Inner satisfaction to customer satisfaction	0.49	5.07	Confirmation
4	Brand identity to customer satisfaction	0.35	4.26	Confirmation
5	Lifestyle to customer satisfaction	0.24	3.12	Confirmation

4.2.2 Indirect Effects

In Table 4 all indirect routes to assess mediator role of customer satisfaction has been shown.

Table 4. Studied indirect routes

Hypothesis	Direction	Beta	T statistic
6	Physical quality to customer satisfaction to brand loyalty	$0.22=0.92 \times 0.23$	5.61, 2.66
7	Employee behavior on customer satisfaction to brand loyalty	$0.23=0.92 \times 0.24$	5.61, 3.37
8	Inner satisfaction to customer satisfaction to brand loyalty	$0.46=0.92 \times 0.49$	5.61, 5.07
9	Brand identity to customer satisfaction to brand loyalty	$0.32=0.92 \times 0.35$	5.61, 4.26
10	Lifestyle to customer satisfaction to brand loyalty	$0.23=0.92 \times 0.24$	5.61, 3.12

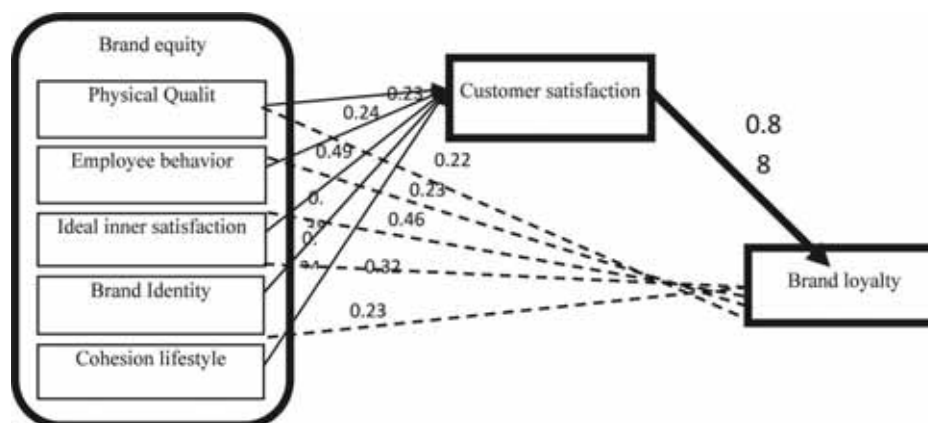


Figure 2. Final model (Nam et al., 2011)

5. Conclusions and Recommendations

According to the first hypothesis, physical quality has a significant correlation with customer satisfaction. However, among the variables related to physical quality restaurants and fast food, restaurants and fast food facilities are not so advanced from the customer perspective and in the typical restaurants level are located. It is suggested that managers of fast food restaurants in physical equipment and facilities at the customer when editing the meal to devote more attention to and the pleasure of eating in this restaurant or fast food for more customers and thereby obtain their consent.

According to the second hypothesis, employee's behavior has a significant relationship with satisfaction. Analysis of data collected and the average customer responses to statements related to employee behavior has shown that from the customer perspective, restaurants and fast food employees in study well to talk and listen to

customer demands and has appropriate behavior, but little help in food choices, or how to order, or taste different foods offer to customers. It is proposed food choices and behavior of employees in order to facilitate greater customer convenience and lack of ambiguity after entering the restaurant or fast food, and any activity that can reduce customer inconvenience, the staff is customer satisfaction. According to the third hypothesis, ideal inner satisfaction has a significant relationship with satisfaction.

In other words, the image of restaurants to their customers in accordance with their wishes and views are perfect and brand is ideal. Customers want brands that are using them earn a place in society. It is recommended that customers' favorite restaurants in this area more managers consider and the quality of their restaurants more promote the area's premier restaurants. Brand identity is a significant relationship with customer satisfaction. In other words, if you take the criticism to the restaurants to the customer, the customer is upset and sees his nearby restaurant. In this context restaurant managers recommended that customers have to pay special attention to further attract their attention. For example, you can SMS or through the systems in virtual spaces on different occasions such as anniversaries or birthdays with communicate your customers and somehow demonstrate to their customers that cannot be viewed solely from the perspective of profitability. But when a customer at the restaurant would not be given to him. Cohesion lifestyle has a significant correlation with customer satisfaction. However, among the subset of these variables, personal lifestyle support from the customer perspective is the lowest average restaurant. It is suggested that managers their restaurant space designed in such a way that the customer feels when eating and the environment is encouraging for him and like his home, relax while eating. Customer satisfaction has a significant relationship with loyal customers. The ultimate goal of managers is customer loyalty in various businesses such as restaurants and fast food. Managers should use different methods to obtain customer satisfaction. Customer satisfaction leads to his loyalty to restaurants in addition to restaurant promotions and customer good will among family and friends, if you still intend to use the services of restaurants have re-visit the same restaurant.

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Contributions of Tourism to Community Development

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Abstract

This study focused on contributions of tourism to community development in Cross River State, Nigeria. Two research questions and two null hypotheses guided the study. The study adopted descriptive survey research design. The population used for the study was 357 respondents comprising, 101 community leaders and 256 tourism staff. A 21-item questionnaire and focus group discussion guide were used to elicit information from respondents and discussants. The questionnaire was analyzed using mean and standard deviation, t-test statistics was used to test the null hypotheses at 0.05 level of significance and the FGD was analyzed qualitatively. Findings from the study revealed among others, that tourism attracted banking institutions and communication industries; thus contributed to a high extent in economic development and very high extent in social development of Cross River State, Nigeria. Some recommendation was made based on the research findings.

Keywords: tourism, development, community development

1. Introduction

Tourism is one of the leading and lucrative industries in the world today that serves as a source of income generation. As one of the fastest growing industry in the world, its recreational activity contributes to a better understanding of places, people and their cultures. According to Omeje (2006), tourism is a social phenomenon which is likened to the art or practice of travelling temporarily out of one's place of abode. Likewise, United Nations World Tourism Organization (UNWTO, 2008) stated that tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places for personal or business purposes.

For Akam and Bassey (2014), tourism is influenced by tourism potentials which are those extraordinary natural, cultural, art and other resources in a particular place, or country serving as attraction, interesting and appealing to the sight and auditory organs of human beings. Tourism, they say, lies in the beauty of nature and man-made tourism potentials which indeed are endless, as it is instinctive to human beings to appreciate the nature like landscape, lakes, mountains or hills, rivers, rocks, waterfalls, caves, monoliths, wildlife, among others. Man-made tourism potential includes extraordinary art and architectural works, museum materials, archeological and cultural sites (Akam & Bassey, 2014). Thus, natural scenery, favorable weather, climate and cultural heritage of these tourist centers attract dividends for the development of host communities where tourist sites are located. According to Agcas (2013), tourism has been identified globally as a very potent instrument for executing meaningful community development projects such as poverty alleviation initiatives and rural emancipation due to its numerous economic benefits such as the huge money realized from tourism activities. Tourism activities include, entertainment and recreational site, travel agencies, hotels, car rentals and others. Omeje (2006) noted that the Gross Domestic Product-GDP from tourism has been argued to be above that of the petroleum sector because it was observed that about 11 percent of World Gross Domestic Product (GDP) and about 10 percent of global employment of 212 million people world-wide and its total turnover volume is around US\$3.4 billion, which represents 5.5% of the global GNP. Nations received about 154 million tourist arrivals, which represents approximately 25% of the international travel traffic and about 24% or US\$109 billion, of the total hard currency income. There may have been marked improvement over the years. The International Monetary Fund (IMF), an arm of the World Bank has identified with the World Tourism Organization providing

assistance in poverty alleviation in rural-urban migration, provision of social amenities and infrastructural facilities (Omeje, 2006).

Despite the attractiveness of tourism sites in Cross River State, it seems the potentials have not been adequately harmonized neither is there any adequate attention given to it in order to utilize and maximize these potentials for adequate development of the host communities. Tolu and Abe (2011) posited that Development is critical and essential to the sustenance and growth of any nation and that a community, region and even country can be classified as developed when it is able to provide qualitative life for her citizenry. The development of an area for tourist not only involves building of hotels and leisure facilities but also create a need to improve existing public and local amenities as well as creating new opportunities for the local communities. Although, there are many undermining factors that characterized most underdeveloped areas, such as insecurity and poor communication network. Epileptic power supply, high rate of unemployment, lack of indigenous industries, deplorable road network, frequent communal clashes, lukewarm attitude of some community leaders and lack of political will seem to have contributed to a large extent to low patronage in the tourism sites hinterland, hence, development of the host communities seem to be hampered. Community leaders are constitutionally elected members of a given community as agents of change. They are the key players in any community development process. It is their responsibility to harness both human and material resources in their community for development process. They are expected to be working closely with tourism staff, faith-based organizations and other community development agencies. Hence, they are recognized as those who are familiar with the culture of the people, and as such qualifies to represent their subjects, motivate and mobilize them to effectively participate in decision-making process for positive improvement in their living conditions. From a different synthesis, Anyanwu (2002) noted that most community leaders are only interested in power sharing and creation of positions instead of solving community problems. Lamenting, he maintained that most community leaders are known for diverting community funds into their pockets for developing estates in state capitals. This may be the reason why most communities in developing countries, like Nigeria, develop at a snail pace.

Understandably, community refers to a group of people living in a defined geographical location, sharing common interest and aspiration and working together to achieve common goals. Such people according to Ogonna (2007), share common geographical location which is normally a village or village group, common cultural traits, traditional affinity and working together to bring about social, economic and political development of the people. Hence, the process of bringing about improvement in people's living condition can only be achieved through the efforts of the people engaging in economic activities that would bring about continuous change in their present situations. Implying that economic growth must be constantly nourished by the fruits of human development such as improvements in people's skills and knowledge coupled with opportunities for their efficient use: better jobs and better conditions for new businesses to grow. Akam and Bassey (2014) affirmed that development is an aspect of progression, increase, improvement and advancement in every aspect of any community or country.

Community Development (CD) has been viewed by different authors based on their perception, hence it has remained a contested phenomenon which combines the idea of "community" with "development". The commonality in the conceptualization of CD by the authors reviewed is that they all point towards, impacting positively to the lives of a people in a given community through job creation, infrastructural development, empowerment, health, arts education, cultural, religious, technological, political, social and economic growth of the people. For example, Afuye (2005) conceptualized community development as a structured intervention that gives communities greater control over the conditions that affect their lives. Providing further support, Eze-Uzomaka (2006) takes CD to mean people in the community engaging in a process aimed at improving themselves in education, self-employment, healthcare delivery, agriculture, social infrastructure and environmental conditions among others.

From the foregoing, community development could be operationally defined as positive changes in socio-cultural, socio-economic and political settings of a giving geographical area which could be accessed through the innovations and advancement emanating from the above changes. In this regard, for effective community development to take place through tourism, the people in the community must also contribute their individual and collective efforts to benefit from the dividends of tourism in their community. The people must be friendly, hospitable, and cooperative ensure there is peace in the community. Moreover, tourism destinations, hospitality industries and activities therein must be attractive and accessible with basic facilities to attract income from both local and international tourists. The process of making any tourism site attractive and accessible can lead to community development. Therefore, in ascertaining tourism contributions to community development

there is need to focus on the economic and social well-being of the society and particularly the host communities.

2. Economic Contribution of Tourism to Community Development

Tourism has been adjudged to have lofty economic benefits to societies. It is worthy to note that the economic contribution of tourism lies in the purchasing power generated from revenues through the expenditure of visitors (Ghosh, 2011). For example, international tourists in their turn spend trillions of dollars in the host countries visited during their travel, resulting in great increase in a wide range of economic activity which, according to WTO (2011), provides a major contribution to foreign exchange earnings of several developing and even developed countries for the development of communities; providing the people with local employment, basic amenities, educational opportunities and infrastructural facilities in order to improve their well-being. Its importance in the economic development of countries made economists to call it an invisible exports which triggers off both economic and social transformation. For example in Nigeria, the economic impact of tourism on her national economy is estimated at US\$ 280 million or N36 billion. Downstream economic impact from the “export” revenues of international tourist spending are estimated to generate additional gross revenue of US\$ 224 million or N29 billion (Abubakar, 2014). Literature shows that tourism is one of the most profitable businesses in the world, now considered the leading industry in many parts of the world. The economic contribution of tourism now is great and cannot be underestimated in many countries due to its faster growth than other sectors of the economy (Fotuhinia, Toranol, & Mazidi, 2014). Tourism acts as catalyst for growth of trade and industry and increase in self employment opportunities like establishing restaurant, kiosk, and cyber café which can facilitate livelihood fast more than formal employment (Ijeoma, 2010).

3. Social Contribution of Tourism to Community Development

In the era of globalization, the social contribution of tourism to community development cannot be ignored by country, state, community and individuals with positive idea for development as Ezeani (2015) clearly stated that today, no country of the world can afford to ignore the importance of tourism to its economic, social and cultural development. More than before, nations and group of nations have become increasingly more aware of the immense social benefits derivable from tourism. Evidence from the words of Bhatia (2007) was that tourism become a popular global leisure activity. An unique industry without smoke, an educational institution without classroom, integration without legislation, and diplomacy without formality. More importantly, social interaction between tourists and host communities enhances the mutual appreciation, tolerance, understanding, awareness, family bonding, learning, respect and likings. It is equally established that residents of the host country or state get enrich with information about the outside world, may also enjoy facilities such as schools, libraries, healthcare institutions, and internet facilities provided by tourism industry (Sharma, Kukreja, & Sharma, 2012).

Further, tourism has been recognized as a basic and desirable human activity which can contribute to investment in arts and culture, and establishment of a new international economic order that will help to eliminate the widening economic gap between development and progress, particularly in developing countries. However, as there are social benefits of tourism, so also there may be the negative social impacts which cannot be ignored even though not within the scope of this present study. It worth mentioning here that there may be change or loss of the people’s indigenous identity and values, culture clashes, increase in crime, increase in cost of living, demand for resources and ethical issues bothering on increase in sex tourism or the exploitation of child workers within the host communities.

4. Statement of the Problem

Generally, tourism has been adjudged a potent sector for generating income and promoting community development. Despite the enormous potentials and contributions of tourism industry to development worldwide due to the huge revenue accruing from the industry, it seems the impact has not been substantially felt in terms of development in the host communities in Cross River State, Nigeria. For example, pilot study by the researchers revealed the presence of serious chains of potholes and dilapidated roads network leading to the host communities housing the giant tourist industries. Also, there are visible poverty, high rate unemployment and unkempt environment among others. It is sad to note that attention has not been adequately given to development of these host communities; in terms of construction of good roads, provision of portable water, good public schools, rural electrification, construction of markets and entrepreneurial skills acquisition training centers where people could learn and acquire saleable skills in order not to depend so much on government for development package that may not be forth coming or seeking for white collar jobs which are grossly inadequate or engaging in militant activities.

5. Purpose of the Study

Consequently, the study generally focused on the contributions of tourism to community development in Cross River State, Nigeria. Specifically, the study sought to:

- (1) Ascertain the extent to which tourism has contributed to the economic development of Cross River State.
- (2) Ascertain the extent to which tourism has contributed to the social development of Cross River State.

6. Research Questions

This study will be guided by the following research questions:

- (1) To what extent has tourism contributed to the economic development of Cross River State?
- (2) To what extent has tourism contributed to the social development of Cross River State?

Hypotheses:

The following null hypotheses were tested at 0.05 level of significance.

H₀₁: There is no significant difference between the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the economic development of Cross River State.

H₀₂: There is no significant difference between the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the social development of Cross River State.

7. Review of Related Studies

Achugbu (2011) carried out a research on, the role of hospitality in tourism development: A Case Study of Selected Hotel Establishment in Awka, Anambra State. The study examined the role of hotels in tourism promotion, examined the security issues as it affects hotel operations and examined the quality of service rendered to customers in these hotels, as well as providing a guide to the numerous hospitality business in Anambra State.

The study used qualitative research method, as well as eliciting information from primary and secondary sources. The population consisted 200 hotel managers. The instrument for data collection was a structured questionnaire and interview. The data was analyzed qualitatively. From the findings of the study it was concluded that hospitality is an indispensable component of tourism and many countries and many world economics rely on their tourism industries. Also, findings further revealed that hospitality is one business that has provided jobs to different kinds of people, helped in beautifying the environment, promoting people's culture and fostering international relations. This study is related to the present study because both focused on tourism but differed in their scope. The earlier studies are specifically of economic, social and cultural development which is considered as prerequisites for community development which happened to be the focus of this present study.

Echeter (2011) carried out a study on developing cultural and historical tourism in Ohaji and Egbema local government Area, Imo State. The purpose of the research was to identify the potential, cultural and historical attraction of tourism and the impact in the study area. The study adopted ethnographic research method which is a natural way of inquiry, seeking in-depth understanding of a social phenomena within a natural setting. The population comprised 540 community leaders and tourism staff while the sample for the study was 140 respondents made up of both community leaders and tourism staffs. Findings from the study revealed that the major problems facing the communities and Nigeria at large is the over dependence in oil revenue and neglect of the development of tourism or investing on any other in-come generating sector. Based on the findings the study recommended among others that there should be national re-orientation on the diversification of the economy, significance of historical and cultural heritage of the people and the need to preserve them for the development of host communities.

Furthermore, Odum (2011) carried out a study on "Community Involvement in Tourism Planning and Development: A study of selected Tourism Attractions in Anambra State". Four research questions guided the study. The study adopted qualitative research methods. The population of the study was 600 community leaders and tourism staff. A simple random sampling technique was used to draw a sample size of 200 community leaders and tourism staff. Data were collected through primary and secondary sources. The data were analyzed using qualitative statistical tool. The study argued that tourism potentials are huge sources of income generation for the state government, and a means for rural development, that cultural, natural, man-made historic, archaeological, and ethnographic attractions exist in Anambra State in large numbers though most of them are underdeveloped. These studies reviewed are related to this present study because they focused on tourism and its

relevance to people's economic, social and cultural development which are considered as prerequisites for community development which is the focus of this present study.

8. Research Method

Descriptive survey research design was adopted for this present study. According to Nworgu (2015), descriptive survey research design aims at collecting data on and describing in a systematic manner the characteristic features or facts about a given population. It is therefore, considered appropriate for this study because the researchers made use of data collected from the sample to ascertain the contributions of tourism to community development in Cross River State (CRS) Nigeria. In addition, a qualitative method of field survey in the form of Focus Group Discussions (FGD) guide was also adopted. Cohen and Manion (2007) stated that Focus Group Discussion is the gathering of a group of people in which they examine specific subject with a moderator who keeps the group to the subject under consideration. The FGD provides a two way communication, offers time for in-depth discussion, provides immediate feedback on new information, fosters group spirit when common concerns are identified and allow for emotional as well as intellectual reaction. Hence, the researchers used both quantitative and qualitative methods of field survey in this study. The study was conducted in CRS, Nigeria which has eighteen Local Government Areas. CRS is bounded on the North by Benue State, on the South by Akwa Ibom State, on the East by the Republic of Cameroun and on the West by Ebonyi and Abia States (Source: Government of Cross River State, 2015). The Area is preferred because of the endowed cultural heritage and enormous natural tourism sites. More so, the people of this area seem to depend so much on the income that is generated through tourism activities in their communities. A little proportion of the indigenes of the area are into public service and politics while majority are predominantly subsistence farmers, business men and women.

The population of this study was 5,458 respondents comprising 3,928 tourism staff and 1,530 community leaders in the three senatorial zones that make up Cross River State. Namely: Cross River Central, Cross River South and Cross River North (Source: Tourism bureau and department of chieftaincy affairs, Calabar, Cross River State, 2015). A sample of 357 respondents was used for this study. This sample size represented 6.54% of the entire population as recommended by Cohen, Manion and Morrison (2011) for a confidence level of 95% of the population.

A multi-stage sampling procedure was adopted for this study. It is sampling technique involving two or more stages of selection (Osuala, 2005). In the first stage, four local government areas (Boki, Etung, Obudu, & Akamkpa) were selected from the three senatorial zones using simple random sampling technique with replacement. In the second stage, simple random sampling technique with replacement was also used to select 16 communities from the four local government areas, 4 from each local governments. In the third stage, proportionate sampling technique was used to sample 256 tourism staff in the 16 selected communities respectively. Proportionate sampling technique was used in the third stage because the numbers of tourism staff in each of the 16 sampled communities were not equal. The whole sampled community leaders numbering 101 were used making it a total of 357 respondents.

Two instruments used for data collection in this study is a structured questionnaire titled "Contributions of Tourism to Community Development Questionnaire" (CTCDQ) and a Focus Group Discussion (FGD) guide.

A 21-item questionnaire and FDG guide were developed by the researchers based on the research questions. The questionnaire consist of two clusters: A and B. Cluster A was used to elicit information on the extent to which tourism has improved economic development of CRS while cluster B determined the extent to which tourism has contributed to social development of CRS. The instrument was designed on a four-point rating scale with numerical response options in descending order of Very High Extent (VHE)-4 points, High Extent (HE)-3 points, Low Extent (LE)-2 points and Very Low Extent (VLE)-1 point.

The Focus Group Discussion (FGD) guide was used to elicit qualitative information from six community leaders and six tourism staff which were randomly selected from the communities not been used for this study.

The FGD schedule guide was based on the purposes and research questions guiding the study which the discussion moderator followed diligently. The FGD schedule was designed in two parts. Part A was an introductory letter written by the researcher to acquaint the discussants with the purpose of the discussion and to solicit their cooperation when sharing information on issues that were raised during the discussion. Part B of the Focus Group Discussion schedule was based on the two research questions. This section is made up of four open ended questions that were discussed, although other related questions were raised as the need arises.

To ensure the validity of the instruments (the quantitative and qualitative), the questionnaire and FGD guide were given to three experts to validate, two of the experts are from the Department of Adult Education and

Extra-Mural Studies and the third is from Measurement and Evaluation unit of the Department of Science Education, all in the faculty of Education, University of Nigeria, Nsukka for critiquing and editing. The corrections and suggestions made by the experts guided the researchers in their final draft of the questionnaire and the Focused Group guide.

To test the reliability of the instrument, the researchers distributed 20 copies of the questionnaire to community leaders and tourism staff in Ibom Plaza, Uyo, Akwa-Ibom State which is not part of the study area. Data collected was subjected to internal consistency test using Crombach alpha procedure. This gave the reliability co-efficient value of .76 for cluster A, .64 and overall reliability of .70 which was an indication that the instrument was considered reliable.

The researchers made use of two field assistants who were briefed on the modalities for administering the instruments to the respondents. The data collected was analyzed using mean and standard deviation. The decision rule used on the mean was 2.50. This means that any item with a mean score of 2.50 and above was considered important for the contributions of tourism to community development and as such accepted. While any mean score below 2.50 was considered negative and unimportant for the contributions of tourism to community development, and therefore was rejected. T-test statistics was used to test the three null hypotheses at 0.05 level of significance. Focused Group Discussion was transcribed and analyzed using qualitative analysis.

9. Results and Discussion

Table 1. Mean rating and standard deviation showing the extent tourism has contributed to the economic development of Cross River State

S/N	Item Statement	N	X	SD	Dec.
1	Tourism attracts banking institution which makes banking transaction easy and added value to the economic activities in Cross River State.	357	2.68	0.03	High Extent
2	Tourism attracts communication industries which created business opportunities and employment in Cross River State.	357	2.72	0.99	High Extent
3	Tourism increases transport network which makes movement of loads and people easy in Cross River State.	357	2.98	0.99	High Extent
4	Tourism brings about construction of roads and bridges in Cross River State and makes business transaction flow well.	357	2.96	0.99	High Extent
5	Tourism brings about expansion of the markets of the host communities in Cross River State and thus causes increase production.	357	2.99	0.06	High Extent
6	The number of tourists that visit tourist sites in Cross River State increase economic development of the host communities.	357	2.85	0.06	High Extent
7	Tourism brings an increase in the rate of buying and selling of goods and services to the host communities in Cross River State.	357	2.57	0.07	High Extent
8	Tourism attracts foreign investors to Cross River State and thus encourages the business growth of the host communities.	357	3.04	1.23	High Extent
9	Tourism brings about infrastructural development which boosts the economy of Cross River State.	357	2.65	0.67	High Extent
10	Tourism increases the internally generated revenue for the development of the host communities in Cross River State.	357	2.55	0.88	High Extent
11	Tourism attracts industrialists for the establishments of companies and industries for community development in Cross River State.	357	2.55	0.88	High Extent
	Grand Mean	357	2.77	0.63	High Extent

Table 1 shows the mean and standard deviations of the extent tourism has contributed to the economic development of Cross River State. Result shows that all the responses of respondents on items 1-11 have mean ratings above the criterion level of 2.50 with their corresponding numerical values of standard deviations, and grand mean of 2.77 with SD of 0.63. Since, the mean ratings are above the criterion level of 2.50 for accepting

an item, this confirms that the respondents agreed to a high extent, that tourism has contributed to the economic development of Cross State.

Table 2. Mean rating and standard deviation showing the extent tourism has contributed to the social development in Cross River State

S/N	Item Statement	N	X	SD	Dec.
1	Tourism promotes peaceful coexistence among the people of the host communities and strangers which is a hall mark for mutual and peaceful coexistence in Cross River State.	357	3.68	1.03	Very High Extent
2	Tourism boosts recreational and sports activities which attract many tourists to the host communities in Cross River State.	357	3.72	1.78	Very High Extent
3	Tourism promotes enlightenment, education in Cross River State which enhances social development.	357	3.98	1.98	Very High Extent
4	Tourism now provides services such as training and skill acquisition programmes for human resources development in Cross River State.	357	3.96	1.99	Very High Extent
5	Tourism brings people together across the globe which enhances mutual coexistence among different races.	357	3.99	1.57	Very High Extent
6	Tourism brings many communities together in Cross River State for the promotion of social creativity through carnival activities.	357	3.85	1.93	Very High Extent
7	Tourism activities attract national and international goodwill in Cross River State.	357	3.57	1.07	Very High Extent
8	Tourism attracts the installation of internet facilities to the tourism sites which enhance social networks connectivity for social interaction and developments among the people of the area.	357	3.04	1.53	Very High Extent
9	Tourism activities increase the level of intimacy that prevails among the people of the area and outside the tourism sites.	357	3.50	1.77	Very High Extent
10	Tourism promotes interpersonal relationships which facilitates social development.	357	3.52	1.88	Very High Extent
	Grand Mean	357	3.58	1.65	Very High Extent

Table 2 shows the mean and standard deviations of the extent tourism contributed to the social development of Cross River State. Result shows that all responses of respondents on the items (1-10) have mean ratings above the criterion level of 2.50 respectively, with their corresponding standard deviations. Since, the means ratings are above the criterion level of 2.50 for accepting an item. This means that the respondents agreed to all the items. The grand mean of 3.58 with a standard deviation of 1.65 signify the very high extent tourism has contributed to social development of Cross River State.

Hypothesis one:

There is no significant difference between the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the economic development of Cross River State.

Table 3. T-test analysis of the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the economic development of Cross River State

Status	N	Mean	Std.	Df	t-cal	Sig. (2-tailed)
Community Leaders	101	3.21	.28	355	-.357	.722
Tourism Staff	256	3.23	.34			

Table 3 shows the probability associated with the calculated value of t (-.357) at 335 degree of freedom for the mean difference between community leaders and tourism staff on the extent to which tourism has contributed to the economic development of Cross River State. Since the probability value of 0.722 is greater than 0.05 level of significance, the null hypothesis was accepted. Therefore, implying that there is no significant difference in the

mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the economic development of Cross River State.

Table 4. T-test analysis of the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the social development of Cross River State

Status	N	Mean	Std.	Df	t-cal	Sig. (2-tailed)
Community Leaders	101	3.01	.28	355	-1.266	.209
Tourism Staff	256	3.09	.29			

Table 4 shows the probability associated with the calculated value of t (-1.266) at 335 degree of freedom for the mean difference between community leaders and tourism staff on the extent to which tourism has contributed to the social development of Cross River State. Since the probability value of .209 is greater than the 0.05 level of significance, the null hypothesis was accepted. Thus, there is no significant difference between the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to the social development of Cross River State.

10. Discussion of Findings

From the results of this study, respondents agreed that tourism has contributed to the economic development of Cross River State. The result among others shows that tourism attracts banking institution, foreign investors and communication industries. This is in line with Ibumilua (2009) who noted that such economic investments brings about influx of people, job opportunities, increase in economic activities and improvement in transportation, thus, making buying and selling, movement of goods, services and people easy. It is equally believed that tourism will motivate the people to engage in various income generating activities, thus encouraging business growth of the host communities and Cross River State in general. This is in line with Eze-Uzomaka (2006) who posited that community development bring about change in an environment and enhanced livelihood of the people so that they can address their problems.

From the research findings, respondents subscribed to all the items that tourism has contributed to a very high extent in the social development of Cross River State. The results revealed among others that tourism, promotes peaceful coexistence among the people of the host communities and strangers, boost recreational and sports activities which attract many tourists to the host communities, promotes enlightenment, education and interpersonal relationships which facilitates social development among people. These findings are in line with Omeje (2006) which affirmed that tourism contributes to social and economic and cultural development of a country. Ghosh (2011) also stated that social interaction between tourist and host community enhance the mutual appreciation, tolerance, understanding, awareness, family bonding, learning, respect and likings which enhance social development in the host community. Moreso, the very high extent recorded against social development in CRS can be attributed to the tourist sites which has promoted and added color to Nigerian carnival festivals and cultural development in Cross River State, thereby improving the content of Nigerian tourism industry.

The results of hypotheses analyzed also indicated that there is no significant difference in the mean ratings of community leaders and tourism staff on the extent to which tourism has contributed to both the economic and social development of Cross River State. These findings are in line with Kizlik (2012), who made it clear that tourism is one of the fastest growing economic development of communities and their social transformation. In support of this, Futuhinia, Toranlo and Mazidi (2014) submits that the economic contribution of tourism now is great and cannot be underestimated. Tourism industry according to the authors, provide job opportunities thereby enhancing the economic sustainability of people.

The focus Group Discussion analysis also indicate that tourism: increases the internally generated revenue for the development of the host communities in Cross River State River State, created local employment opportunities for members of the communities, increases transport network which makes movement and transportation of goods easy. However, amidst the heat of the discussion, three of the discussants quipped that, much needs to be done in their communities by the government so that they will feel the desired impact of tourism in their lives.

11. Conclusion

This study has revealed the economic and social significance of tourism and its multiplier effects on a country's economy for community development. The establishment of tourist facilities and infrastructural facilities like banking and communication industries in rural communities is a cost effective way of meeting national development objectives which focuses on the development of communities. Tourism attracts foreign investors and as such, the economic value of foreign exchange earnings from tourism contributes to government's revenue for the development of rural areas and community projects in order to ensure sustainable livelihood of the people. The findings also revealed that tourism is an effective tool for positive image making, offers good opportunity for personal contact and interchange of cultures and ideas; thus creating opportunities to seek cooperation, inter tribal peace, and tranquility; it is expected that these pre-requisites for community development are sustained.

12. Recommendations

Based on the findings of the study, the following recommendations are considered:

- (1) The government should promote sustainable tourism development in order to ensure that the local communities, not only the state or federal government benefits from the financial dividends generated from tourism industry within their domain.
- (2) The communities need a re-orientation on the need for them to know that their destinies are in their hands and should not rely on the government for solutions to all the problems in their community, rather they should combine their efforts and bring about change in any aspect of their lives requiring change. This is because community development is people-oriented, problem-solving and like democracy, it is of the people, by the people and for the people.
- (3) There is need for communities to partner with faith-based and other Non-governmental organizations in their development initiatives so that they can provide the communities with basic amenities and infrastructural facilities so that more tours and more revenues would be realized. This is necessary too, since the government alone cannot foot development initiatives alone.

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Implementation of Visuals Arts (Fine and Applied Arts) as Vocational Programmes in Tertiary Institutions: Problems and Prospects

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Abstract

Over the years, Nigeria and indeed world leaders have been battling to combat the raging poverty and unemployment rates. Although vocational education has been identified as a panacea to these, significant studies reporting obstacles to the implementation of visuals arts as vocational education programs in tertiary institutions have remained grossly insufficient. This is the issues addressed in the study. Survey research design was adopted while 200 purposively selected art education and vocational education respondents from the University of Nigeria, Nsukka, provided participated in the study. Among others, that the respondents agreed that the problems facing the implementation of visual art in tertiary institutions as a vocational education program range from poor awareness to lack of parental support. Further studies examine from students' perspective, on how best to implement visuals arts as vocational education programs are recommended.

Keywords: implement, problems tertiary institutions visuals arts, vocational programs

1. Introduction

Visual arts is a very broad aspect of art that includes areas like photography, painting, ceramics, drawing, filmmaking, craft, architecture, sculpture, printmaking, design, crafts, video, among others forms of aesthetics. These arts forms are very essential because people can hardly do without them. For example, those who have built houses need them painted, those who have occasions (e.g., weddings, funerals, naming ceremonies, birthday parties etc.) need to keep memories of such events alive through photographs and video coverage. The instances are many and as such, provide insight into centrality of visual arts to any society. Maryland State Department of Education (2012) define visual arts as all forms of creative and expressive production in material and media resulting in architecture, painting, sculpture, photography, craft, ceramics, printing, and applied design. Hagtvedt, H., Hagtvedt, R. and Patrick (2008) noted that visual arts are complex stimuli that provoke emotions. McCarthy, Ondaatje, Brooks and Szántó (2005) classified visual arts into embedded art such as design work embedded, and collectibles and crafts such as photography, painting, and sculpture. Commenting further, McCarthy et al. write:

These different categories of objects differ in their quality, in who consumes and produces them, and in the nature of the markets (size, price levels, and organizations) in which they are sold and displayed. Drawing bright lines between these different categories of visual arts objects is somewhat arbitrary, but we assert that understanding the structural differences is central to understanding the present state of the visual arts (p.xiv).

The interest of the current study from the assertion of McCarthy et al. above is not just about the definition of visual arts or what constitutes it, but the mention of producers and consumers of visual arts. What this means therefore is that visual arts, when properly handled as vocational program, could serve as a means of income and eventually, reduce the poverty rate and unemployment currently ravaging the Nigerian state.

It is an open secret that poverty rate in Nigeria is alarming. The World Bank (2014) world development indicators showed that 63.1% of Nigerian population lives below \$1.25 a day while 83.1% live below \$2 a day.

What this suggests is that efforts aimed at reducing the poverty rate in Nigeria are encouraged. One of the ways of reducing poverty is through job creation. Unfortunately, unemployment rate in Nigeria is on the increase. The National Bureau of Statistics (NBS, 2016) defines unemployment as persons (aged 15-64) who are available for work, actively seeking for work but are without work. NBS also defined employment as a person who is engaged in the production of goods and services, thereby contributing to the Gross Domestic Product (GDP) in a legitimate manner. A survey by the National Bureau of Statistics (2016) showed that the working age population increased from 104.3 million in third quarter of 2015 to 105.02 million in fourth quarter of the same year. This represents a 0.68% increase over the previous quarter and a 3.2% increase when compared to fourth quarter of 2014. Also, the number of unemployed in the labor force increased by 518,102 persons, leading to an increase in the national unemployment rate to 10.4% in fourth quarter of 2015 from 9.9% in third quarter of the same year. This sad reality suggests the need to introduce more vocational education programs in Nigerian tertiary institutions (example colleges of education, polytechnics, monotechnics and universities) to make graduates self-dependent after graduation. Mshelia and Abbas (2012) corroborated that vocational education is a tool of poverty reduction by providing people with the skills and knowledge to raise their output and generate income.

Vocational education training provides learners with skills that develop craftsmanship as well as other practical problem solving approaches. Kotsikis (2007) holds that vocational education is aimed at the acquisition of qualifications related to a certain profession, art or employment or that provides the necessary training and the appropriate skills as well as technical knowledge. Efstratoglou and Nikolopoulou (2011) added that vocational education demands of specialties, as they are formed by the structural characteristics of each county's economy. The submission of Efstratoglou and Nikolopoulou suggest that vocational education programs regarding visual arts in Nigerian tertiary institutions must be structured such that consideration is given to the economic features of the Nigerian state. Oguejiofor and Ezeabasili (2014) noted that some researchers often refer to the twin concepts "Vocational-technical education" to mean education of skills or skill acquisition. The Nigerian National Policy on Education (2004) defines technical and vocational education as a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related science and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic and social life. Going by the discourse so far, it can be said that scholars are in agreement that vocational education generally equips people with skills that will make them useful to themselves and the society. Umunadi (2013) corroborates that vocational education, if properly planned and implemented, could serve as an empowerment tool. In this light, Nwachukwu (2001) noted that in the planning and implementation of vocational education programs, the following should be taken into consideration:

First, the vocational and technical education curriculum must be in harmony. What this means is that such a curriculum should not be alien to the learners. The content of the curriculum must contain contemporary issues with local examples that the learners can easily identify. It will be very difficult for learners to cope with contents that are not familiar or that do not contain current issues. There are many contemporary issues, that when eloquently expressed in the contents of vocational education programs could stir and sustain learners' interest. For example, in the case of visual arts, it will be appropriate to provide learners with benefits in visual arts business such as photography, designing etc. An insight into the growing number of graduates unemployment in Nigeria could also be adequate.

In the second place, Nwachukwu noted that learners must express readiness to receive what is taught. This is largely because certain factors significantly correlate readiness to learn. These factors, according to Umunadi (2013), are age, family background, nutritional status, fatigue or lack of it. Others are belief and attitudes of learners. Based on this premise, it can be argued that the effective teaching and learning will depend on the smartness of the teacher to identify these factors. For example, when a teacher understands that children from rich homes are less likely to pay attention to vocational programs than those from poor homes, such a teacher will tailor his/her teaching in such a way as to capture the attention of both children. The same thing is applicable to males and females as males, especially given the patriarchal system in Nigeria, are more likely to pay attention to vocational education programs than females. This is because, in Nigeria, and indeed Africa, the males are made to understand that as the head of the family, they must work hard while the females are made to understand that they do not necessarily need to work hard because a man will, in the final analysis, marry them and take over their responsibilities. What this means is that, teachers who want to succeed in teaching vocational education programs must devise ways of igniting and sustaining the interest of both sexes.

Thirdly, Nwachukwu added that learning experiences must create a convivial atmosphere for the learners to engage in critical thinking that will ultimately lead to the generating of ideas. Thinking is very essential in

vocational education programs because it is the process through which solutions are provide to problems. Nwachukwu (2001) averred that thinking is the entire process of addressing problems. Okolocha (2012) suggested ways of implementing vocational education programs thus: Putting in place workable policies and strategies; advocating vocational technical education as a key element in the education industry; learning in authentic and real-world environments; encouraging continuity in vocational technical education and training; putting in place coherent guidance and counselling system which will help to put students in proper career path; encouraging the development and usage of qualified trainers; creating awareness through image building, vocational attractiveness and participation in vocational technical education in Nigeria Setting up ambitious and realistic goals that will enable Nigeria to be the most competitive and knowledge based economy by the year 2020; creating and sensitizing the Nigerian populace on the need and vision of vocational technical education; maintaining approved school age and exit in order to pave way for physical and mental maturity required for the acquisition of vocational skills; encouraging investment in quality vocational technical education system; tackling the issues of insufficient and lack of up-to-date data for assessment of progress in vocational technical education; adopting stringent measures for proper and efficient execution of policies regarding VT; adopting uniform standard and certification in vocational technical education at all levels.

Although vocational education programs are generally considered as effective tools for economic empowerment and job creation, its implementation in Nigeria has been limited by several factors. Akhemonkhan, Raim and Dada (2014) in a study purposively sampled 150 respondents from Yaba College of Technology, Federal College of Education (Technical), Lagos State Polytechnic and Federal Science and Technical College found that lack of quality assurance has impacted negatively on the implementation of vocational education programs within the study area. This study is relevant to the current one because it provides empirical data in the study of the obstacles against effective implementation of vocational education in Nigeria. Also, Lilly and Efajemue (2011) did a study to find out the challenge of vocational education in Rivers state Nigeria. The population of the study was vocational students at tertiary level in Rivers state. A sample of 288 was derived from vocational National College of Education (NCE) and post NCE students in proportion of 150 and 138 respectively in two tertiary institutions in the state. Structured questionnaire was used to collect data. Simple percentages and chi-Square (X^2) were used to analyze the data collected. The researchers found significant differences on the perception of problems such as poor planning, lack of political will, poor infrastructure and ineffective SIWES (Students Industrial Work Experience Scheme) in the implementation of vocational teacher trainee programs.

Although the literature on vocational education is enormous, significant attention has not been paid to its implementation vis-a-vis visual arts. Scholars have often investigated vocational education in general thus leaving a gap with regards to specificity. This reality has led to the emergence of the following posers—what are the problems facing the implementation of visual arts as a vocational education programs in tertiary institutions in Nigeria? How can visual arts best be implemented as a vocational education program? What prospects await the implementation of visuals arts education as a vocational program in Nigerian tertiary institutions?

2. Methods

Descriptive survey was used for this study. The design is usually deemed applicable when the aim of a study is to describe, explain or explore a phenomenon (Babbie, 2013). Therefore, hence this study sought to explore problems and prospects of implementation of visual arts as a vocational education program in tertiary institutions, survey was considered useful. The population of this study was all the arts education and vocational education staff of the University of Nigeria, Nsukka. It was very difficult to describe the population in figures because of the absence of a list containing all the staff. Efforts to get the list failed.

The researcher determined the sample size for this study through a purposive sampling means. Therefore, 200 respondents (100 each of art education and vocational education) were sampled to participate in the study. Copies of the questionnaire were administered to the respondents at their various offices between the hours of 8 am-4 pm. The instrument was administered by the researcher personally to avoid too much cases of missing copies.

To determine the face validity of the instrument, its initial copies with purpose and research questions were given to two experts. One from Educational Foundations, and one from Sociology of Education, both from the University of Nigeria, Nsukka. They were specifically requested to assess the adequacy of the items in getting the required data, the quality of its language and the logicity of its arrangement. At the end, some items were removed, others restructured and new ones provided in their place. Their comments were strictly adhered to by the researcher to produce a final copy of the instrument.

To determine the reliability of the questionnaire, it was trial tested on 20 respondents (10 art education respondents and 10 vocational respondents) from Enugu State University of Science and Technology (ESUT). Care should be taken that these respondents were considered appropriate for the trial testing because they possessed the same characteristics as those from the study area. Cronbach Alpha method was adopted to measure the consistency coefficient of the questionnaire. Cronbach Alpha was considered appropriate because it ensured the homogeneity of items on the sections.

The Cronbach Alpha values were .786 for Table 1, and .89 for Table 2. The results indicated that the various sections were reliable. The Statistical Package for Social Sciences (SPSS) was used in the analysis. In doing so, descriptive statistics and inferential statistics were used. Among descriptive statistics methods, mean and standard deviation were used to answer the research questions.

3. Results

Out of the 200 copies of the questionnaire administered, 196 (98%) were returned and found useful. The result is hereby presented below:

Table 1. Mean and Standard deviation of respondents on the problems facing implementation of visual arts as vocational education program in tertiary institutions

		Mean	SD	Remark
1	Lack of awareness on the part of students	3.5	0.35	Accepted
2	Poor commitment on the part of school management	3.4	0.76	
3	Poor counselling for students on the importance of visual arts an empowerment tool	3.5	0.67	
4	Lack of fund	3.4	0.65	
5	Students' lack of interest	4	0.79	
6	Non-inclusion of visual arts as a vocational program in the curriculum of tertiary schools	3.1	0.54	
7	Too much emphasizes on paper qualification	3.5	0.78	
8	Lack of support from parents	3	0.67	

Source: Field survey, 2015.

The result from the table above revealed that the respondents agreed that the problems facing the implementation of visual art in tertiary institutions as a vocational education programme range from poor awareness to lack of support from parents. This is because all the items presented in the table had mean scores of 3.0 and above, which is within the accepted bench mark. Table 2 shows how visual how visual arts can best be implemented in tertiary institutions.

Table 2. Mean and Standard deviation of respondents on the how to implement visual arts as vocational education program

		Mean	SD	Remark
1	Creating awareness to students on the importance of visual arts as an empowerment tool	3.2	0.34	Accepted
2	Training and retraining of instructors on modern trends in visual arts	3.1	0.96	
3	Counselling students on the importance of visual arts an empowerment tool	3.7	0.69	
4	Provision of fund	3.2	0.67	

5	Punishing students who do not indicate interest in visual arts vocation	2.9	0.89	Rejected
6	Visual arts as a general and compulsory course for all students at the tertiary level vocational programme in the curriculum of tertiary schools	3.7	0.59	Accepted
7	Less emphasises on paper qualification	3.8	0.75	
8	Parental support children to engage in visual arts as a	3.2	0.63	

Source: Field survey, 2015.

The result from the table above revealed that the respondents agreed that to properly implement visual art as a vocational education programme in tertiary institutions, awareness must be created on its importance, there should be regular training and retraining of instructors to guide learners, periodic counselling should be carried out, fund should be made available to sponsor the programme, it should be included as a general and compulsory programme for all students, less emphasises should be placed on paper qualification while parents should also support their children and wards.

4. Discussion of Findings

The result of this study showed the existence of a myriad of obstacles against the implementation of visual arts as vocational education programs in tertiary institutions in Nigeria. This findings run similar to that of Akhuemonkhan, Raim and Dada (2014) and Lilly and Efajemue (2011) who found that implementation of vocational education programs in tertiary institutions has suffered setbacks because of factors ranging from financing, to lack of interest, to lack of qualified instructors among others. The findings also suggest the way forward (e.g., creation of awareness, funding, counselling, less emphasizes on paper qualification etc.) on how to better implement visual arts as vocational education programs in tertiary institutions. This finding has opened a new debate on approaches towards combating poverty and reducing the rising rate of unemployment in Nigeria. Each year, the existing tertiary institutions in Nigeria churn out graduates to join others already frustrated in the labour market. Duze (2010) cited in Temple (2014, p. 18) paints a gory picture of the situation thus:

University graduates in their millions, roam the streets searching for non-existing collar jobs. It has become increasingly difficult for school leavers from all levels and types of education (including vocational/technical/business education graduates) to transit from school to wage earning employment as hundreds of thousands of them are turned into the labour market at the end of every academic session, without a corresponding rise in paid jobs. It is no longer like the oil boom years of the seventies and eighties when automatic transition from school to employment was the case.

Visual arts present a viable avenue through which graduates of tertiary institutions can become self-dependent. This is because of the existence of its different forms like ceramics, painting, film making, photography among others. Graduates can choose from among these many visual arts forms become experts and eventually gain skill of it that can become a source of income. It is expected that school administrators and government agencies will find the result of this study useful in a bid to promote vocational education, reduce unemployment and empower graduates. Further studies determining obstacles against students' interest in visual arts are encouraged. It is also recommended that subsequent studies should examine from students' perspective, how best to implement visual arts as vocational education programmes. Finally, it is recommended that all stake holders in the Nigerian project should form a synergy and ensure the full implementation of visual arts as vocational education programs in Nigerian tertiary institutions.

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Anthropological Perspective Study on the Muslims in Mysore City-India (Case study Shia Muslims)

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Abstract

India, because of including a collection of religions and religious minorities altogether in itself, especially in this modern era, is a remarkable case of study and consideration. This study also, as an anthropological research and in order to get familiar with the religious identity of Muslims and Shias of Mysore in particular, has played its role. This project is a case study about the Shia Muslims in Mysore; it has also a historical look upon formation of cultural identity of Shias in India. During the reign of the Arab traders, they brought Islam into the South Indian state of Karnataka almost as soon as the faith was initiated in Arabia. Along with their faith, Muslims brought many products to the region. The Islamic presence and power in the state reached its greatest heights during the reigns of Hyder Ali and his son Tippu Sultan. Though killed by the British in 1799, Tippu Sultan was one of the only national leaders to defeat the British in battle and is still considered a hero for many Indians. The internal structure of Indian Muslims as a religio-ethnic group was quite complex. Shias Islam has deep-rooted influence in present and history of India from North to South with various Shia Muslim dynasties ruling Indian provinces from time to time.

Keywords: Muslims in Mysore, anthropological study, Shia, Muslim community of India

1. Introduction

Islam means submission. Those who submit are called Muslims. There are five pillars for all Muslims to adhere worldwide: 1) there is no God but Allah, and Mohammad is his prophet. 2) Praying five times daily, kneeling in the direction of Mecca (the holy city). 3) Giving of alms (a share of each Muslim's income is given to support the mosque and the poor). 4) Fasting throughout Social-Intellectual (the ninth month of the Muslim calendar). 5) Visiting the Hajj (every believer who is able to do so must go on a pilgrimage to Mecca). Islam teaches absolute monotheism and Mohammed's primacy as Allah's last Prophet on earth. Islam stresses the brotherhood of believers, no difference of religion and secular life, obedience to God's Law, abstinence from alcohol, and of good works. Shab-e-Barat, Id-Ul-Fitr, Id-Ul-Zuha, Muharram and various Ures of Sufi saints are the major festivals observed by them. The religion of the Muslims is the youngest of the great religions in the world. The process of Islam is becoming a more prominent part of the political and social order. This may be through adoption of laws based on Islam a stricter code of behavior for Muslims in a community, or significant portions of a population converting to Islam (Madan, 2007). India is a diverse mix of different religions and religious sects, most of them are derived from Hindu, Islam and Buddhism. About 82% of the people of India are following Hindu rituals and about 13.4% are Muslims. India also has more than 2.3% Christians and 1.9% Sikhs. Although India was the birthplace of Buddhism, the Buddhist population in India is currently estimated at only about 0.8%. In addition, Jainism, 0.8% followers of Zoroastrianism, Jewish, Baha'i and other faiths is 30 Afro Asian Journal of 0.4%. However, India's largest community of Iranian Baha'i and Zoroastrian religious sect, Ahmadiyah are around the world. Most of the Muslims in Delhi, West Bengal and northwest areas of the population have been living in Kashmir. Thus, India has the largest Muslim population after Indonesia and Pakistan in the world (Ahmad & Imtiaz, 1981). India is one of those countries in which Islam has brought development and flourished of civilization. History of Islam's introduction to India starts from the end of 1st century Hegira, i.e., the 7th century AD with the decline of Sasanid Dynasty. Spread of Islam in the time of Mahmud Qaznavi and his conquests in Punjab continued and reached its climax in the time of Gurkanis to 1526 AD, since 932 Hegira equal, all government and religious positions were in the hands of Iranians (Mutahhari,

1983). Qutub Shahis made efforts for preaching Islam and Shiism in Deccan. Once upon a time, Shias of India had governmental power and had undeniable penetration in the government systems. At the moment, study of Shias has become an important subject for research in the Subcontinent, and there are so many scientific and research-related valuable works at hand, like the books *Shia and Shia Islam in India*, John (1946) and a *socio-Intellectual History of the Isna Ashari Shiis in India*, Saiyid (1988) in which very good studies are done about Shias and historical, political-social and cultural problems are discussed in it. At the moment, the population of Muslims in India reaches over 200 million and they are scattered in different regions of this country. This study, however, concentrates on the Mysore city on Shias; the center of this religious minority in this region is Deccan which has always welcomed Iranian culture and Shiism from long ago and is the root of Shias development in India. "Deccan" was the name given to the southern parts of the Indian subcontinent in the past. The State of Karnataka and the city of Mysore are located in this region as well. Although historically Shiism has its origins in Arab nations, it rapidly and widely grew in Iran, Pakistan and India. This paper explores, by discussing ethnographic examples from different parts of Mysore and beyond, the multi-dimensional and many-layered contexts of reciprocally shared cultural realms and inter-religious and synthesized cultural formations, including common religious observances.

Questions of research:

How were the main bases of Shias and their geographical position in Southern India and in Mysore? Who had the most influence in spreading the Shias culture in Southern India and Mysore? The migration of Shias in Southern India and Mysore?

2. Research History

The anthropological approach to the study of religion involves the scientific and not the humanistic concept of culture. The basic feature of the scientific approach to the study of religion are four-fold; universality, empiricism, comparison, and objectivity. Universality: it implies that the anthropological approach encompasses all known religions and religious phenomena and that it does not exclude any on the basis of "taste", "decency", or similar unscientific considerations. Ethical and moral standards differ from culture to culture, and it is the scientific task of the anthropologist to study them as they actually exist, and make sense out of them with reference to the context (Dale & Stephen, 1988).

Empiricism: The study of religion in contemporary anthropology is empirical because it is family rooted infield research. The main body of data used for analysis is gathered by anthropologists through direct contact with the carriers of the various cultural traditions. Not only is this method more reliable than the one dependent upon reports from untrained observers, but it also affords the field worker an opportunity to examine religion in the total cultural context. Comparison: Through the systematic comparison of similar religious phenomena, anthropologists seek to achieve a greater or lesser amount of generalization. These comparisons may also reveal historical relationships and evolutionary sequences or many serve as a basis of typology building. Objectivity: The anthropological study of religion demands that the investigator remain impartial and unbiased (Irfan, 2008).

As an anthropologist, he is not concerned with the possible truth or falsehood of particular religious beliefs as such but with their existence and the significance, which the people attach to these beliefs, rituals, etc. These four principles, combined with the holistic approach and the application of the concept of culture, constitute the basis of anthropological methodology. Anthropologists use the basic field work method not only in their studies of specific groups of people, but also in many instances where they turn their attention to one specific phenomenon, be it language, kinship, social organization or religion. An anthropological study of religion will thus give an insight not only into the nature of religion itself, but into many other cultural institutions and human behavior (Hefner & Robert, 1998).

Cultural Diversity, religious Syncretism and People of India (Mysore) and an anthropological Interpretation Abstract Ethnic origins, religions, and languages are the major sources of cultural diversity. India is a country incredible for its biological and cultural diversity. However, the process of synthesis and integration has been extensively at work in most parts of India. Indeed ethnic identities and even the culture traits of Indian people have never been frozen in time or in space, they have been in a state of flux. Though each group or community has a distinctive identity and ethos of its own, it does not exist in a social vacuum (Roma, 1998).

Rather, it forms part of an extended and dynamic network. The sharing of space, regional ethos and cultural traits cut across ethnic and sectarian differences and bind the people together. Thus, we witness a firm balancing between cultural diversity and syncretism pervading the foundation of Indian civilization. Indeed by extension, such cultural phenomena are observable, to lesser or greater degree, in the entire sub continental civilizational arena. The pre-existing sub continental civilizational continuum historically includes and encompasses ethnic

diversity and admixture, linguistic heterogeneity as well as fusion, and synthesis in customs, behavioral patterns, beliefs and rituals. In the present era of growing cultural condensation, syncretism-synthesis is fast emerging as a prevailing event (Gadgil & Guha, 1992).

India is a country incredible for its biological and cultural diversity. It is the natural resources that attracted many streams of people to the subcontinent at different times, from different directions; bringing together a great diversity of human genes and human cultures (El Zeinh, 1977). The spiritual notion of equality in Islam ceased to have political and economic reality. The Muslim tradition in India was dominated by the prevailing social system: the presence of hierarchy and class consciousness, superstitious and consciousness of rights. The Muslims were deeply religious but Islam had departed from the Arabian type. As most of the Muslims were converts from the Hindu fold, they shared with the Hindus the same passion and love for the soil. They had many things in common with the Hindus (Hefner, 1998). Prof. Mujeeb also writes, "the structure of the Indian Muslim society has little resemblance to the democratic classless community integrated and inspired by the belief in One God, which the Indian Muslim fondly imagines it to have been a very complex organism, containing within itself healthy and unhealthy tensions, and forces of growth, stability and decay" (Ahmad & Imitiaz, 1973).

There are many books written about Muslim rule in India, which provide the details of different dynasties.

Here, we are more concerned with the synthesis that took place between the rulers and the rules during that period. Singhal writes in detail about the influence of Islam on Indian society and vice versa. He writes that the impact of Muslim rule was greater on urban life than rural. Influenced by the royal court, the urban population attained a high degree of sophistication in language and literature, art and crafts, manners, dress, diet, luxuries and refinement. In the Indian villages where practically the entire Muslim population was descended from Hindu converts, the traditional Hindu outlook and social forms were retained (Osella & Caroline, 2007).

The Muslim communities are linguistically heterogeneous; in all, many languages are spoken by them in different states. The Urdu language is spoken by the largest number of communities; followed by Kashmir, Kutchie, Gujarati, Marwari, Hindi, Bengali, Malayalam and Hariyanvi. Other languages spoken are Arabic, Assamese, Awadhi, Marathi, Mewari, Sindhi and Tamil. They all speak regional dialects as well. Muslims in North India are generally organized around biradaris (the term is used in various ways, as jati, qaum or qwabila and also Khandan or Kumba), which are placed in a hierarchical order. The biradaris among the lower order of the Muslim social hierarchy generally maintain the norms of endogamy. Under the impact of Islamisation, there have been changes in the names of the lower orders: the Qasai are now Qureshi or Sheikh Qureshi; the Lohar call themselves Saifi; the Julaha prefer the term Ansari or Momin Ansari. Muslim identity has been reinforced by the collective observance of festivals like Id. The Muslim is primarily a rural population (65.99%), with a substantial number of them living in urban areas (34.01%), which is higher than the national level (Filippo & Caroline Osella, 2008).

The Sunni Muslim inhabits all the districts of the state. They speak Urdu within the family and kin groups and Kannada with others. They use the Perso-Arabic script among themselves as well as with others. They are non-vegetarians who take chicken, mutton and beef. Rice, wheat and ragi are their staple cereals. Consanguineous marriage with one's father's brother's daughter or mother's sister's daughter is permitted and sororate (junior) is allowed. Adult marriages are settled through negotiation and monogamy is the common form.

Polygyny though allowed is rarely practiced. A Lachcha is the symbol of marriage for women. Dowry or meher is fixed for the girl and is promised for future payment while dowry is paid in both cash and kind, they follow the partly local rule of residence after marriage. Divorce is permissible with religious sanction and both men and women can seek it. Remarriage of widows, widowers and male and female divorcees are permissible. Of late, marriageable age among them has reportedly increased. They generally prefer to live in nuclear families. All children get a share from their father's property, but females inherit less than the males. Women have a role to perform in bringing potable water, social functions, ritual and religious spheres. They observe pre-delivery ritual (satvase) during the seventh month of pregnancy. The child is named on the day of birth. They observe pollution for 40 days after the delivery and a purification ceremony, chill, is performed. Aqiqa and initiation (maktab) ceremonies are performed for both male and female children while circumcision is performed for boys between 5 and 7 years of age. The puberty rites are observed for girls. The marriage rituals are performed at the bride's residence and a feast is hosted by the bride's parents. The nuptial ceremony is performed at the groom's residence. Nikah is the most important marriage ceremony held at the residence of the bride, in which the Imam conducts the proceedings. The consent of the bridegroom to accept the bride as his life partner is taken at that ritual. The dead are buried. A death rite known as ziarat is observed on the third day and chelam on the fortieth

day after a death (Mines & Mattison, 1975). Trade, industry, transport and business are their main occupations. A few of them are employed in government and private services. They have an association, the Sunnatul Jamat, which looks after the welfare of the community. They profess Islam and their sacred specialist or imam is from the same community who officiates during all life-cycle rituals, besides performing worships and imparting religious teachings. Ramadan, Bakrid, Muharram and Meelad are their festivals which are of religious significance. Traditionally the Sunni Muslims exchange water and cooked food with other Muslim subgroups. They also exchange food with the Christians and share water sources with other communities. The burial ground is shared with other Muslim subgroups. They participate in festivals like Muharram and Id. Formal education is favored for their boys and partly favored for girls. Their attitude towards modern medicines is favorable and they make full use of modern healthcare facilities. Family welfare programmers also find favorable response from them. They are covered under the IRDP. Some of them are self-employed as auto-rickshaw drivers and general merchants. Rations are available to them through fair-price shops (Mayaram Shail, 1998).

2.1 Karnataka

Mysore is one of the important districts in Karnataka state and is situated in the Deccan Peninsular. According to 2001 census, the population of Karnataka was 52.73 million. The population of Karnataka has increased to 17.20% as compared to the last census. The state of Karnataka is ranked ninth in terms of population in India. Karnataka is one of the top states in terms of literacy rate in India. According to the census of 2001, Mysore city had a total population of 799,228 and among this population, 19% were Muslims. Although most Muslims in Mysore were Urdu speaking, but Mysore has several other Muslim communities (ElZeinh & Abdul Hamid, 1977).

Arab traders brought Islam into the South Indian state of Karnataka almost as soon as the faith was initiated in Arabia. Along with their faith, Muslims brought many products to the region. Muslims introduced coffee, incense sticks and the paper industry to the local economy. According to 2011 Census, the population of Karnataka has 31,057,742 males 30,072,962 females the sex ratio in Karnataka is 1000 males for every 968 females. The total population of Hindus was -83% the Muslims -11% the Christians -4%, Jains -0.78% and Buddhist -0.73% (Ahmad & Imtiaz, 1981).

2.2 Muslims in Mysore

About 500 years old Mysore city came into existence before the period of Hyder Ali and Tipu Sultan during the period of Raja Chak Dev Raj Wandeyar. From 1673 till 1704 Wandeyar Kings ruled in Mysore for a longtime and they had alliance with Aurangzeb and the Emperor accepted them as his governors. Aurangzeb gave Chikka Deva Raja Wandeyar five symbols of governments: Flag, Neshan-i-Mahi, Naqara, Khilatht, Takhtvataj. In addition to these, Aurangzeb gave one official Persian seal to Wandeyar and kings used this as government monogram during the entire period of Wandeyar dynasty. On the official seal, it was written in Persian "Ahmand Shahi with date 1162 Hijri". However, the migration of Muslims started during the period of Hyder Ali and Tipu Sultan, and in that period majority of Muslims was living in Mysore.

3. Methodology

This research project is mainly qualitative research. The present work aims to study Muslim Shia's in India. The main data collection methods would be case studies, and books.

Standard Anthropological techniques such as observation, interviews, case study, genealogy, participant observation method the rites, rituals, life cycle rituals, fairs and festivals and religious practices will be collected in different sacred complexes secondary information will be collected from the library, community associations, department of statistics, department of social welfare and social welfare offices, minority cells established in different places. Earlier studies on the Muslim and other related materials are collected among the religious leaders.

4. Findings

Mr. Sadat aged 40; there are 26 Ashorakhanas in Mysore out of which 23 are managed by donations of people and 3 more belong to the Association of Jafari Mosque in Mysore: Husseinia Association, Bab-ul-Havaej and Jelvezar Husseinia which are supported by Jafaria Mosque.



Figure 1. Sometimes Ashorakhana in Mysore

Ashorakhanas at the homes of people: Ali Hussein, Askari Imam Bara, Fayazi, Ghazali and Mir Gholam Hussein, Mirza Ghanbar Ali in (Lashkar Mohalla).

Hassan Niafi, Mir Maghbol Hussein, Mir Moheb Hussein, Arman Leila Khanom, Azakhana Zeinabia, Azakhana (Shamim) Taher Ali, Azakhana Nosrat, Azakhana Rashke Behesht, Azakhana Alijan, Azakhana Chachi, Niazmand Ali, Mirza Taher Ali, Mir Abul-Fattah, Mir Mottaghi Ali (in Mandi Mohalla) Mir Nasir Ali, Mir Naser Ali, Mirza Karam Ali, Mir Hashem Ali, Mir Sajed Hussein (in Udaygiri) Khoja Yusuf Ali, Mirza Ehsan Ali (Bani Mantab) Some of the Shias rituals in Mysore: Moharram is very much considered in Mysore, the eating customs, clothing customs, etc. Usually in Moharram, people wear white or black clothes; generally, white and black colors are more popular. These clothes are blank and without any patterns. About the type of food, we have to say that in the first 10 days of Moharram, they try not to eat meat, some of them do not drink water and they fast on the day of Ashura. What is more observed in the month of Moharram is giving food, i.e., lunch and dinner on the days of Tasua and Ashura in Jafaria Mosque and in some Ashorakhanas like Rashke Behesht. In other days as well, every family that wishes to give food sends it to mosque or gives its expenses so that food be given to the mourners in the mosque. Before supper, they serve tea, i.e., Indian tea made of tealeaves and milk and for supper, they usually have vegetarian food and after that, they serve mutton Biryani or chicken Biryani with bread and cucumber, etc.



Figure 2. Moharram-Mysore

On the 7th day of Moharram, the stabbing ritual starts in one of the Ashorakhana with mourning rituals. Young children, teenagers and old people start moving with sharp stabs and blades in their hands following a long flag (Alam) carried by one person in front of them. Kids in front and a horse, covered with white sheet that has red spots of symbolic blood and arrows on it, March in front of the crowd of mourners. The mourners, accompanied by a singer who tries to increase Husseini enthusiasm, stab themselves on the head, chest and back. Soon after, the smell of blood spreads all over the area. Before moving, I was among the mourners taking photos and picturing them. They gather in one Ashorakhana and sing elegies there; after that, the flag (Alam) and the horse with symbols of blood starts moving in the front. These symbols signify the memory of Karbala and the battle of Imam Hussein (PBUH) for the mourners. Also one person on another horse who carries a flag (Alam) decorated with jasmine flowers—as an Indian culture symbolizing Hazrat Ghasem-starts (a.s) moving with the group of mourners. Groups of children and youngsters as well as other mourners are observed in different circles in these rows. They cut themselves on the head and chest with knives, blades and daggers. This is one of the rituals that bring lots of people from different areas together. Of course, Mysore police tries to provide the ceremony with security. After that, they pass Mandi Mohalla Street and reach another Ashorakhana. They get entertained with tea and other drinks there. Women also in Ashorakhana perform their mourning by singing elegies. Moharram rituals in Mysore is one of the most outstanding religious ceremonies during which every night families give food to the mourners in Masjid Jafaria and the mourners eat dinner in the mosque. This food is called Tabarrok or offering for Imam Hussein (PBUH). On the day of Ashora, Shias of Mysore fast from morning till afternoon and eat nothing. This is called Fakhah. They even do not talk to anyone. They consider these rituals as parts of Moharram ceremony. Here, most Shias talk in Urdu and some others are fluent in English.

I started my interview with Mr. Mirza who is from Mysore and he works in one Ashorakhana and takes care of it. I visited Mirza Arjmand Ali who is Shia in Jafaria Mosque. He is 48, married, and has three children. He is an electrician and has diploma. He is from Mysore. He has a heritage from his family. Economically, he is self-sufficient. He says they hadn't had much religious tension in Mysore long back and people lived friendly lives together. But nowadays, this seems to be less; still we have peaceful lives together. We don't have much relationship with Christians in Mysore unless there is any dealing or business, etc. Religiously, Mysore is a good and secure place for Muslims. Wealth and education are considered as two important factors of social position here. However, it seems that those who have higher education are respected far more. As for migration, Shias of Mysore mostly go to Hyderabad and Bangalore, especially Bangalore which is closer to Mysore. It is better for both working and also for entertainment. As for abroad, most immigrants go to the Arab countries like Dubai, Saudi Arabia, etc. and fewer ones go to European countries like Australia, Canada, etc. But there are some other immigrants as well who come to Mysore from Bangalore, Hyderabad and Mumbai. Hindus and Sunnis compared to other minorities like Christians, Buddhists, etc. are the majorities in Mysore. Marriage rituals among Shias are almost like the ones among Hindus in which the whole expenses have to be paid by the girl's family; but if a boy wants to pay the expenditure, there is no problem with that. Still there is the system of solving problems with

mediation of elderly people among Shias. They usually solve their problems themselves and hardly go to police to solve them legally; but for bigger problems, they get the help of police. In religious ceremonies, the managing board of Jafaria Mosque often collects some gifts and donations from people and spends it on Tabarok food and on helping the poor; also if someone needs financial support for funeral ceremonies, etc. The board helps him. This helping is carried out in weddings and funerals. Leisure time for the people of Mysore is going to historical or entertainment places like Tipu Sultan, Mysore Palace, cinema, market, park, etc.

It seems that Mr. Mirza does not have any financial problem; in daytime, also he doesn't do anything special, unless it is needed. His brother has a hotel in Bangalore. The elder brother provides his own family and others by investing in Bangalore. Previously, Mirza's father was doing handicraft; but at the moment, Mirza himself has no hand in handicraft. He lives in Niagar Ashorakhana where his house is located. His brothers and sisters live in the Arabian countries. He also says that he loves Iran very much. He specially is very much interested in pilgrimage to Imam Reza's (PBUH) shrine, the eighth Imam of Shias in Iran. We must mention that most of the Shias in Mysore have special love for Imam Reza (PBUH) in Iran.



Figure 3. Tabarok food in Jafaria Mosque-Mysore

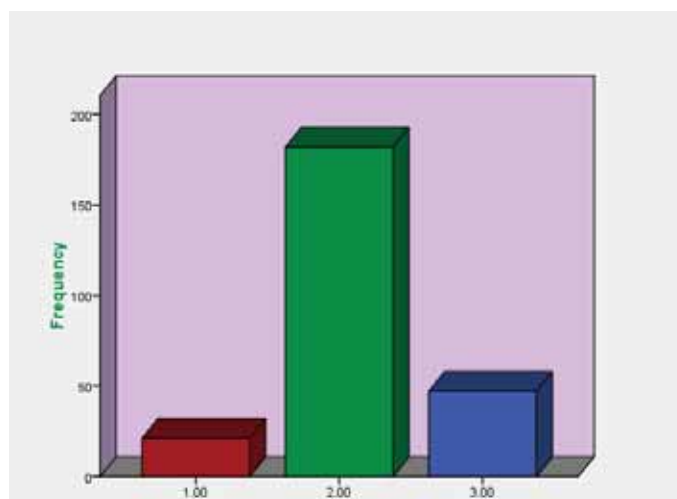


Figure 4. Level Status Shia Muslims in Mysore

In this figure, social and economic status of Shia Muslims in Mysore is demonstrated. In the first or low level, there are 21 members 8.4%; in the second or medium level, there are 182 members 72.8%; and in the third or high level, there are 47 members 18.8%. Eventually, recognition of cultural identity and the influences of globalization on their economy are also remarkable aspects of these changes.

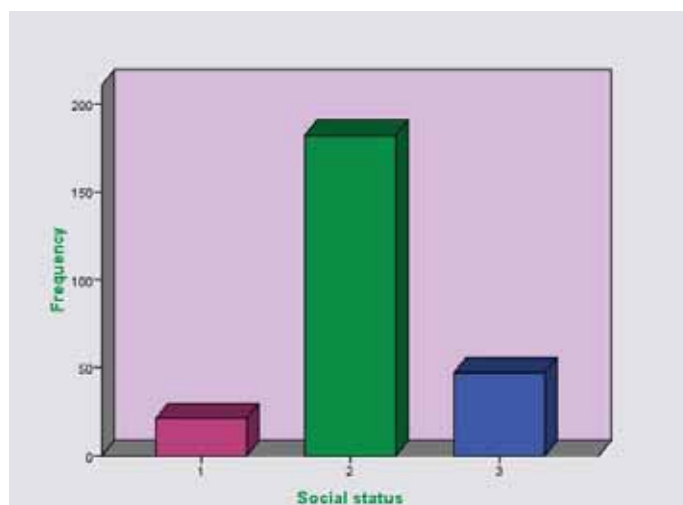


Figure 5. Social status

Social position also has been categorized. Level 1, i.e., low includes 15 members 6.0%; level 2, i.e., medium has 167 members, i.e., 66.8% and level 3 or high includes 68 members 27.2%. They are mentioned in the chart as well. Economy status shows 79 people, i.e., 31.6% in level 1; 143 members 57.2% in level 2; and 28 people 11.2% in level 3.

5. Conclusion

The Shias religion of Isna Ashari flourished in Deccan in the 16th century AD. However, before that (approximately in 748-936/1347-1528), Bahmanid Kingdom was the first government, which prepared the basis for penetration of 12-Imamidi Shiism in this region. Bahmanid rulers established independent kingdoms in Ahmad Nagar, Bijapur and Golkandeh, which resisted until the Mongol invasion. After spread of Imamia religion in the time of Shah Ismail Safavid in Iran, Bijapur was the first government to announce Shiism as its official religion in Deccan. This historical period also has been carefully studied in this research and of course the social as well as economic lives of Mysorean Shias population that is a very small scale of this great historical and cultural event in India.

At the beginning, Bahmani Sultans declared independence in the Northern Deccan; and after their decline, Deccan was divided between five governments that had great roles in continuation of spreading Iranian and Imami Shias culture till many decades after Bahmanis (Mosaheb, 2002). Barid Shahian Dynasty was established in central Deccan in the city of Bidar by Qasem Barid Turk. It was replaced by Adil shahi dynasty in 1629 AD which was founded in Bijapur, in the northern border of Karnataka State by the Iranian Yusuf Khan Adil shahi. The importance of Adil shahi Dynasty is because of the introduction of Shiism to India in their period; another important point is the Iranian nationality of Adil shahis which originates from central Iran, Qum and Saveh. Their full dependence on Safavid dynasty is another important point about them (Basorth, 2002). Hollister has emphasized on their connection to Safavid court for spreading Iranian and Shias culture (Hollister, 1994).

In fact Yousuf introduced Shia Islam to India. He was from Iranian Shias; Iranians who were scholars, saints, literati and politicians took refuge in the different states of India. They laid the foundations for development of Iranian and Islamic culture with the support of Indian powers in the north and south of India, with their Persian language, which was the language of politics and literature. Formation of Islamic governments in the soil of India was equal to weakening of racial elements of Turkic, Indian and Mongol nations in the Iranian culture and civilization.

Islam entered India mostly through Iran; this means that people understood Islam in that country through Persian and they mostly converted to Islam through Iranian preachers, Sufis and scholars. Muslims of the Indian Subcontinent became familiar with Hadiths (sayings of the Prophet) and Tafseers (interpretations) of the Quran through their Persian translations. Commuting of the immigrants from Iran to and fro India brought more reciprocal cultural influences. Since the 10th century HG, in the Safavid period in Iran and Temurid period in India, these relationships have developed in all aspects; presence of Adilshahi Dynasty in Bijapur, which was part of Deccan, caused more immigration of Shias to that region especially because of this dynasty's close relations with Safavids in religion and beliefs. Adilshahis were very much concerned about buildings and turned their capital, Bijapur into one of the finest examples of Islamic architecture in India. They were supporters of arts and wisdom. Following that, the Shias thinkers and scholars enriched sciences and philosophy remarkably. Since the beginning of the Islamic history until the end of the 18th century, the Indian born Shias started developing the thought system of the country. As a result, the history of the thought system of Shias in India is the same history of the Iranian immigrants who brought a share of their best teachings from their country and introduced it to the society of cultures and arts in India. In addition to other reasons, development and spread of Shias Islam and Islamic Sufism is due to the efforts of scholars, Sufis, Iranian preachers as well as introduction of Persian books. Shias do not have independent political organization for themselves and the political Shias figures follow their political activities separately in all parties; hence, they are far behind Sikhs in this case. Unfortunately, the few Shia political figures in India do not have much concern for the improvement of the poor cultural and economic situation of Shias in this country. Shias are in very lower conditions compared to followers of other religions and sects. The considerable cultural and social organizations of Shias all over India are very few in numbers. Unfortunately, since the Shias in India consider themselves a minority, they have always been thinking about defending themselves and have rarely had the opportunity to spread the teachings of Ahle Bait. In order to defend themselves, they have sometimes made mistakes in knowing their enemies as well.

Status of Muslims state agencies should actively develop and implement policies geared to improving the socio-economic status of Shia Muslim women and the Muslim community generally to ensure their full participation in public life as Indian citizens. Such measures could include central government (collaboratively with state governments) implementation of loan schemes to facilitate the setting up of small businesses or skill training for Muslims; and the implementation of schemes for Muslim girls' and women's education in both rural and urban areas. This should be in conjunction with socio-economic measures so that Shia Muslim women, particularly in urban areas (where illiteracy levels are high), can enjoy such economic benefits.

6. Recommendations

Status of Shia Muslims: given the poor educational and low socio-economic status of Shia Muslims in general, the central and state Governments should ensure the implementation of primary and secondary education programmes for Shia Muslims, particularly Shia Muslim women. A survey of availability of textbooks in minority languages should be undertaken, after which state governments should take up printing and distribution of textbooks.

The central and state governments must take measures to ensure the availability of teachers for Muslim communities, the appointment of women teachers, and the establishment of girls'/women's hostels with the provisions of mid-day meals and school uniforms. Schemes for adult literacy and reading rooms for Muslim communities must be undertaken by the central and state governments in order to address the compelling literacy needs of Shia Muslim women. In addition, state governments should institute scholarships for minority students. Removing social prejudice against Muslims: the central government must take appropriate action against people, institutions and political figures that practice or propagate discrimination or intolerance based on religion.

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Participatory Budgeting Role in Improving the Performance of Managerial Head of Department East Java

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Abstract

This study aims to analyze the role of participatory budgeting in improving the performance of managerial leadership of the Office of East Java province after being moderated by variable organizational commitment and the perception of innovation.

The results of the study serve as a development of the science of public sector budgeting and guidelines for the government's efforts in improving the credibility of local government agencies.

The study population is in charge of the budget, namely Echelon III Office of East Java province as many as 130 people and saturate the sample set. The research instrument was a questionnaire and analyzed using Moderated Multiple Regression. Of the 105 questionnaires were successfully analyzed, it was concluded that participatory budgeting can improve managerial performance.

The results of the analysis demonstrate that organizational commitment able to moderate the role, while the perception of innovation is not able to moderate the role of participatory budgeting in improving managerial performance.

Keywords: participatory budgeting, organizational commitment, innovation perception, managerial performance

1. Introduction

1.1 Background

Budget is an important component in an organization, whether profit or non-profit organizations, private and public organizations. Budgeting should be done precisely, using appropriate models, as well as the calculation of reasonable fees. There are fundamental differences between the budgets of private sector with the public sector budget/government. Budget private sector are generally confidential, because the source of funds used is own capital, while the public sector budget should be made public because of the source of funds used are owned by the community. Included in the budget of public sector resources, among other taxes, levies, SOE profits, loans and government bonds, etc.

Decentralization of the public sector have an impact on delegation of authority determining the work program of the center to the regions comprised of Working Unit (SKPD), Regional Finance Management Task Force (SKPKD), and the Regional Secretary. According to Law No. 17 of 2003 on State Finance of Article 19 paragraph (1) and (2) explained that each SKPD shall draw up a budget based on performance to be achieved or commonly called the Performance-Based Budgeting (ABK). SKPD responsible for providing human resources able to organize and manage the budget effectively and efficiently in accordance with the public interest. SKPD referred to in this research is SKPD Regional Government of East Java province in which stand 20 East Java Regional Office based By law No. 9 in 2008. Hill (1998) stated that decentralization is a broad distribution or a shift in decision-making authority to lower management levels While Brownell and McInnes (1998), in an organization with a low level of decentralization, the manager felt that he was regarded as less responsible, less involved in the preparation of the budget, and I felt pressure from higher up. They also said that the budget is something less useful and restrain their discretion.

The budget process can be done through several approaches, top down (authoritative) or bottom up (participatory). Sardjito (2005) stated that in the system budgeting top down, plan and budget amounts have been

set by the supervisor/subordinate power holders while the budget/budget execution just do what I have set. Typically, the application of this system makes the performance of subordinates are not effective because they are often superior performance demands were too high while the resource is too small (limited). Meanwhile, the bottom up budgeting system (participative budgeting) is a budgeting approach that focuses on efforts to improve the motivation of employees in the organization. Subordinate or be involved in implementing the budget budgetary concerns sub-section in order to reach an agreement between superiors or subordinates proxy budget/budget execution. Budgeting models thus serve as an assessment tool based on the achievement of performance targets and financial efficiency. The achievement of budget targets indicate a good performance, and vice versa.

Based on the theory of goal setting, participation will increase subordinate commitment to the objectives of the budget target (Chong V. & Chong K., 2002). The opportunity to engage and influence the budgeting process will increase the confidence of subordinates, subordinate control feelings and ego involvement with the organization. All together will lead to less resistance to change and more accepted and chose a commitment to budget decisions.

Implementation of the budget involves all the human resources that exist within the organization so that accountability is the responsibility of each user technical implementation of the budget of the organization. Accountability is dependent on the performance of the duties and authority of each employee, but the performance accountability of government employees by Mardiasmo (2002) can be measured starting from the establishment of the strategic planning, implementation, reporting s/d performance evaluation. Several factors predicted to influence employee performance accountability among others the role of leadership, employee understanding of the direction and goals of the organization, as well as the ability of employees in control of himself. Stoner et al. (1995) found locos of internal and external control measures how much a person is able to control events that affect them and therefore contributes to performance accountability.

1.2 Formulation of the Problem

Based on the background of the problem is known that the budget process could have an impact on the performance managerial leader. Leaders who can control themselves and were able to direct the employee is believed to create accountability for performance.

This problem was formulated: Becker (1978) suggest that participation is the decision-making process shared by two or more parties that would apply in the future for decision-making.

- a. Is participatory budgeting influence managerial performance?
- b. Is able to moderate the influence of organizational commitment participatory budgeting on managerial performance?
- c. Does the perception of innovation able to moderate the influence of participative budgeting on managerial performance?

2. Literature

2.1 State of the Art

This research is applied research in the field of International Public Sector Accounting which analyzes the role of participatory budgeting in improving performance accountability of government employees. To increase the significance of the research, some previous studies that discuss similar issues can be used as a reference in determining the direction of research.

a. Kunwaviyah (2010) examined the role of organizational commitment and innovation variables in the analysis of the effect of budget participation on managerial performance of public sector organizations. Data collected through questionnaires to 160 structural officials SKPD Magelang regency. The study concluded that there is a direct influence of budget participation on managerial performance. Participation budget also affect the organizational commitment and innovation, but organizational commitment and innovation does not affect the performance.

b. Agusti (2012) examines the effect of budget participation on the performance of local government officials Bengkalis with decentralization and organizational culture as moderating variable. With the object of research of the Echelon III and IV, this study proves that the higher the participation of officials in budgeting will increasingly higher the managerial performance. Decentralization has significant relationships in the influence of budget participation on the performance, while the culture of the organization has no significant effect.

c. Sharon (2013) examines the Effectiveness and Efficiency Analysis Executing Budget Planning Agency (Bappeda) South Minahasa. With descriptive methods, the study concluded that during the 2008-2012 level and effectiveness criteria Minahasa BAPPEDA budget implementation varies greatly. The further difference between actual budget with budget targets, it can be concluded that the effectiveness of a low budget execution. Therefore, public sector organizations are required to run value for money that is efficient in procurement and allocation of resources as well as effective in achieving goals and objectives. From several previous studies concluded that the role of budgeting participation in improving managerial performance showed results that are inconsistent and even contradictory. This is what makes the basis of this study.

2.2 Theoretical Basis

2.2.1 Participatory Budgeting

Budget is a statement regarding the estimation of the performance to be achieved organization over a specific time period stated in the financial measures (Mardiasmo, 2002). While Mowen and Hansen (2004) stated that the budget is a financial plan the future in identifying organizational goals and actions needed to achieve them. Benefits of the budget, among other things: 1) a tool for managers to plan, 2) provide information that can be used to improve decision making, 3) provide performance evaluation standards, and 4) improving communication and coordination.

The budget process is an important activity because the budget has a possible impact of functional and dysfunctional attitudes and behavior of members of the organization. The impact is shown by the presence or absence of a budget as a means of controlling the function of good to motivate members of the organization to improve its performance. Sardjito (2005) stated that the budget can be done through:

a. Top down or budgeting authoritative

In the top down budgeting, top management determines the overall budget period, while preparing the entire operating budget (including the lower level operations). Budgets are not communicating but authoritative command. However, this budgetary control can provide better decision than participatory budgeting.

b. Bottom up or participatory budgeting

Participatory budgeting is a good communication tool because it allows top management to understand the problems facing employees. This method can increase the motivation of employees to achieve organizational goals. But if not controlled properly, participatory budgeting can lead to budget targets which are easily reached or not in accordance with the target company.

2.2.2 Organizational Commitment

Organizational commitment is defined as the degree to which an employee is favoring an organization as well as the desire to maintain membership in the organization (Robins, 2003). Organizational commitment is a positive dimension of the attitude of the employees related to the performance as an indicator measuring the level of feelings and confidence in the organization in which they work (Setyanto, 2011). Inside there is a commitment earnest efforts and individual attachment to reach a target, put the interests of the organization, as well as trying to make organizations more productive and profitable. Organizational commitment awakened if each individual to develop three attitudes: 1) Identification, an understanding or appreciation of the objectives of the organization, 2) Involment, a feeling of being involved in a job or a feeling that his job is fun, 3) Loyalty, a feeling that the organization is the place to work and a place to stay comfortable. Organizational commitment has a three-dimensional, namely 1) Affective (affective commitment) if an employee wants to be part of the organization because of their emotional attachment or sense of belonging, 2) Sustainable (continuance commitment) if the employee stay in an organization because he needed the salary and other benefits, and 3) normative (normative commitment), when the last employee in the organization for reasons of moral or ethical. Someone said to have good organizational commitment if all three dimensions of commitment are developed together.

2.2.3 Perception Innovation

The term perception of innovation is often discussed in several studies on the relationship between budgetary participation and performance in different terms. Some call managers value orientation towards innovation, the perception of innovation, as well as work related value of innovation. Although there are differences in terminology, the meaning and the items used to measure the perception of innovation related to the relationship between budgetary participation and performance is the same. Perception innovation illustrates the extent to which managers feel that they are innovative (Kunwaviyah & Safrudin, 2010). They will be motivated to work

when he learned that his ideas accepted by the organization. Thus managers who have a good perception of innovation that will have a good performance.

2.2.4 Managerial Performance

Miftah (2003) says that leadership is a way to put a person to influence others. Meanwhile, according to Maxwell (2000) defines leadership is an influence, i.e., the ability of a person to influence others to follow suit. In general, a quality leader must have some characteristics as follows: 1) have a responsibility balanced, 2) build a role model positive, 3) have excellent communication skills, 4) have a positive influence, 5) have the ability to convince others. To be able to perform its functions properly, a leader must possess honest, innovative, and authoritative. Managerial performance of a leader is defined as the performance of individuals in managerial activities that include planning, investigation, coordination, supervision, staffing, negotiation, and representation (Ramadhani & Nasution, 2009).

International studies link participatory budgets to individual performance (Nouri & Parker, 1998), to the exchange of information (Parker & Kyj, 2006), role ambiguity (Parker & Kyj, 2006; Chong et al., 2006), organizational commitment (Parker & Kyj, 2006; Chong et al., 2006; Nouri & Parker, 1998), to the uncertainty of tasks (Jermias & Setiawan, 2008; Lau & Tan, 1998), job satisfaction (Chong et al., 2006; Yuen, 2006), job tension (Lau & Tan, 2006), and so on. Regardless of how the connections between participatory budgeting and all these factors are made (directly or indirectly), what matters is that they exist.

3. Research Methods

3.1 Research Design

The study design is presented in Figure 1 below.

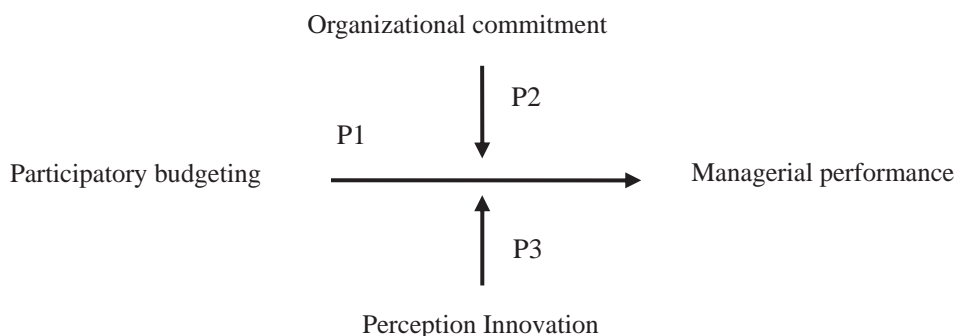


Figure 1. Design research

3.2 Population and Sample

The population was 130 people in charge of the budget (Head/Echelon III) of 20 Office of East Java province, as presented in Table 1. Sample set saturated.

Table 1. Data employment regional office of East Java province

No.	Name of the Regional Department	Field Name
1	public health Office	1. Secretariat
		2. Health Care
		3. Control of Diseases and Health Problems
		4. Development of the Health Resources
		5. Development and Empowerment of Public Health
		6. The Office of Technical Implementation Unit
2	Social services	1. Secretariat
		2. Social and Rehabilitation Services
		3. Social Empowerment

		4. Assistance and Social Protection 5. Advocacy and Social Protection 6. Institutional Development UKS and Development 7. The Office of Technical Implementation Unit
3	education authorities	1. Secretariat 2. Kindergarten / Elementary and Special Education 3. Education SMP and SMA 4. Non-Formal Education, Informal and Cultural Values 5. Teachers and Education Personnel 6. The Office of Technical Implementation Unit
4	Department of Transportation and Road Transport Traffic	1. Secretariat 2. Transportation Development 3. Road Traffic 4. Road Transport 5. Traffic Operational Control transport. Street 6. Railways and Transport Traffic River, Lake, and Ferry (LLASDP) 7. Sea Transportation 8. Air Transport 9. The Office of Technical Implementation Unit
5	Office of Communications and Information Technology	1. Secretariat 2. Development of Information Technology 3. Dissemination and Information 4. Communication Networks 5. Empowerment of Information & Communication Technology 6. Post and Telecommunications 7. ICT Infrastructure Management 8. The Office of Technical Implementation Unit
6	Dept. of Manpower and Transmigration Population	1. Secretariat 2. Training and Productivity 3. Employment 4. Industrial Relations and Working Conditions 5. The labor inspectors 6. Population 7. Population Mobility 8. The Office of Technical Implementation Unit
7	Department of culture and tourism	1. The Secretary 2. Culture, Art and Film 3. History, Museum and Antiquities 4. Development of Tourism Products 5. Marketing 6. Development of Tourism Resources 7. The Office of Technical Implementation Unit
8	Department of Cooperative, Micro, Small and Medium Enterprises	1. The Secretary 2. Institutional Cooperative 3. Cooperative Effort 4. Micro, Small and Medium Enterprises (SMEs) 5. Facility, Financing, and Business Savings and Loans 6. The Office of Technical Implementation Unit
9	Department of Youth and Sports	1. The Secretary 2. Development of Youth Organizations 3. Development of Youth Activities 4. Development of Sports Performance 5. The Office of Technical Implementation Unit

10	Department of Public Works Highways	<ol style="list-style-type: none"> 1. The Secretary 2. Setup and Control 3. Coaching techniques 4. Development and Improvement 5. Maintenance 6. The Office of Technical Implementation Unit
11	Department of Public Works Irrigation	<ol style="list-style-type: none"> 1. The Secretary 2. Utilization of Water Resources 3. Construction and Development 4. Operation and Maintenance 5. Development Benefits 6. The Office of Technical Implementation Unit
12	Department of Public Works and Human Settlement Spatial	<ol style="list-style-type: none"> 1. Secretariat 2. Spatial Subdivision 3. Spatial 4. Building Management 5. Housing 6. Clean Water Environmental Sanitation 7. The Office of Technical Implementation Unit
13	Department of Agriculture	<ol style="list-style-type: none"> 1. Secretariat 2. Food Crop Production 3. Horticulture 4. Facilities and infrastructure 5. Processing and Marketing Office Technical Implementation Unit
14	Department of Agriculture	<ol style="list-style-type: none"> 1. The Secretary 2. Infrastructures 3. Production 4. Protection of Plantation 5. Farm 6. The Office of Technical Implementation Unit
15	animal husbandry Department	<ol style="list-style-type: none"> 1. The Secretary 2. Animal Health 3. Veterinary Public Health 4. Cultivation and Development of Livestock Animals 5. Agribusiness 6. The Office of Technical Implementation Unit
16	Department of Fisheries and Marine Resources	<ol style="list-style-type: none"> 1. The Secretary 2. Aquaculture 3. Fishing 4. Marine, Coastal and Monitoring 5. Processing and Marketing of Fishery 6. The Office of Technical Implementation Unit...
17	forestry Service	<ol style="list-style-type: none"> 1. Secretariat 2. Forestry Planning 3. Consolidation of Forest and Nature Conservation Areas 4. Forestry Production Development 5. Land Rehabilitation and Social Forestry 6. The Office of Technical Implementation Unit
18	Department of Industry and Commerce	<ol style="list-style-type: none"> 1. Secretariat 2. Standardization and Industrial Product Design 3. Agriculture and Chemical Industries 4. Metal, Machinery, Textile and Miscellaneous

		5. Transport, Electronics, and Telemanika
		6. Domestic Trade
		7. International Trade
		8. Metrology
		9. The Office of Technical Implementation Unit
19	Office of Energy and Mineral Resources	1. The Secretary
		2. General Mining and Oil and Gas
		3. Energy and Electricity
		4. Groundwater
		5. Geology
		6. The Office of Technical Implementation Unit
20	Department of Revenue	1. The Secretary
		2. Development of Information Systems and Data Processing revenues
		3. Local Tax
		4. Other Income
		5. Control and Evaluation
		6. The Office of Technical Implementation Unit
	amount	130 Bureau / Division

Source: Civil Service Bureau of the Province of East Java, the data is processed.

3.3 Research Variable

Operational definitions and indicators for each of the variables are presented in Table 2 below.

Table 2. Operational definitions and indicators variable

Variable	Operational definition	Indicator Variables
Participation Budget (PA)	And the extent of involvement of managers in the budgeting process	1. Activities in the preparation of the budget 2. Clarity reason to revise the proposed budget subordinate 3. Frequency of advice/opinions 4. The importance of the contribution made 5. The frequency of submission of the opinion
Organizational Commitment (KO)	Encouragement of the individual to do something in order to support the success of the organization	1. The ability to work above the average 2. pride to become part of the organization 3. Willingness to do all the work 4. Compliance individual values dg organizational values 5. Satisfaction choose the organization as a place to work 6. Concern for the future of the organization
Perception Innovation (PI)	How big a manager feels that he is an innovative	1. Always have interesting new ideas 2. Capable of reading opportunities (new) on the market 3. Having experience in their area of responsibility now 4. Be careful in performing their duties 5. Oriented forward
Managerial Performance (KM)	Individual performance in managerial activities to realize the objectives of the organization	1. Planning: setting goals, objectives, and policies 2. Investigation: collecting and preparing the information in the form of reports, records, and accounts 3. Coordination: exchange information with others in the organization 4. Evaluation: assessing the feasibility of proposals, reports, and organizational performance 5. Supervision: direct, lead, and develop subordinates 6. Settings staff: maintain and sustain subordinates in his unit

-
- 7. Negotiations: the performance in the purchase, sale, and contracts in the goods/services
 - 8. Representation: informing the vision, mission and activities of the organization by disseminating to outsiders
-

3.4 Data Analysis and Discussion

3.4.1 Data Analysis

Effect of Budget Participation on Managerial Performance.

Table 4. Results of testing influence PA against KM

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	30.864	2.817	10.956	.000	
	Participation	.212	.074	.274	2.289	.025

Source: SPSS output, processed.

Table 4 shows that the variable coefficient beta of Participatory Budgeting in influencing Managerial Performance is 0.212 with a t-value of 2.889 and a significance level of 0.005. These values prove that participative budgeting influence managerial performance.

3.4.2 Testing Results Moderate Organizational Commitment

Tests on the ability of the Organization's commitment to moderate the influence of budget participation on managerial performance are presented in Table 5.

Table 5. Moderation organizational commitment

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-40.920	29.486	-1.388	.168	
	Participation	2.073	.829	2.673	2.500	.014
	commitment	2.674	1.060	2.686	2.521	.013
	ModKOMIT	-.069	.030	-4.236	-2.340	.021

Source: SPSS output, processed.

Table 5 shows that the variable Organizational Commitment able to increase the value of t in the influence of budget participation on managerial performance of 0,211 points from t-value of 2,289 into 2,500. Increasing the value of t followed by strengthening the significance level of 0,025 into 0,014. It can be concluded that organizational commitment able to moderate the effect of budget participation on managerial performance.

3.5 Moderation Perception Test Results Innovation

Tests on the ability of Perception Innovation in moderating influence between budget participation on managerial performance are presented in Table 6 as follows.

Table 6. Perception moderation innovation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-76.533	55.002		-1.391	.167
1 Participation	2.932	1.418	3.781	2.068	.041
Innovaton	3.779	1.934	3.093	1.954	.053
ModINOV	-.096	.050	-4.518	-1.919	.058

Source: SPSS output, processed.

Table 6 shows that the perception of innovation lowers the t-value in the influence of budget participation on managerial performance of 0.221 points from t-value of 2,289 into 2,068. The decline in the value of t followed by weakening the significance level of 0.025 into 0.041. It can be concluded that the perception of innovation is not able to moderate the effect of budget participation on managerial performance.

4. Conclusions and Recommendations

4.1 Conclusion

Principles of conclusion of the study are:

- Budget participation on the performance of managerial leadership of the Office of East Java province.
- Organizational commitment able to moderate the effect of budget participation on managerial performance.
- Perception innovation is not able to moderate the effect of budget participation on managerial performance.

4.2 Suggestion

- To improve the performance of managerial leadership accountability Office of East Java province, should be of financial reporting standards that reflect the involvement of Echelon III in the budgeting process.
- There needs to be an effort to maintain the organization's commitment and increasing innovation those responsible for the budget.

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Review of Academic Dishonesty among College Students

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Abstract

Cheating and academic dishonesty is a moral anomaly in the field of scientific research and reflecting, i.e., academic environment and studies show that this phenomenon in many of the worlds is important problem.

This study measured the dishonesty of students in a quasi-experimental design. For this purpose, features lack of integrity by manipulating the facts were examined and meanwhile first, basic English language test coordination between the strict terms of the 280 students come to practice and after correction of examination papers by teachers, without leaving any traces on them instead, the plates are returned to students and provide them with answers to their paper to correct their score Master announced. The difference between the actual score (score of master) and score of the students to have their own, amount of honesty or lack of integrity appointed them and its relationship with some demographic and socio-ethical characteristics have been studied.

The results showed that more than 62 percent of the students in your grade to master completely honest with 26.6 percent have low honesty and the rest did not have the necessary integrity and the mean difference of scores announced by the professors and students have been about two score. Also results of chi-square tests and gamma, about the relationship between students' evaluation of amount of sincerity with sincerity in the declared objective amount of the master score was not significant, this finding means that between demonstrators and people of integrity and honesty in practice, there are gaps.

Keywords: cheating, academic dishonesty, plagiarism, scientific code of conduct, ethics of science

1. Introduction

Basically, scientific misconduct is defined as a structure that includes various forms of deviancy, including cheating on tests, plagiarism and collaboration in scientific work to be incorrect (Kisamore et al., 2007, p. 382). According to some scholars, students, despite it being wrong understanding confessed to committing it (Davis et al., 1992).

So perhaps cheating related to the costs and benefits of it (Bunn et al., 1992; Kerkvliet, 1994). Scientific codes of conduct that are written in most universities, cheating in connection with academic dishonesty (Academic Dishonesty) have defined (Hilliard et al., 2011).

There are many studies that show cheating and academic dishonesty in many universities in the world are serious problems and topics that focus for long-term academic research including measurement comments that are cheating (Bernard et al., 2004). Some of these studies include: technology applications in the way of helping people who cheat (Popp & Wertz, 2009), the effect of age (Smyth & Davis, 2004; Nonis, 2001; Crown & Spiller, 1998), the impact of demographic factors (demographic) (Hetherington & Feldman, 1964), and the impact of conditions in the fraud (Kisamore et al., 2007).

According to the review of which was conducted over three years by researchers at Duke University, improper behavior like cheating among university students around the world, especially females and more generally on the rise over the past 65 years has tripled. Studies also show international schools that academic dishonesty is a widespread problem in the world (Chapman & Lupton, 2004; Lambert et al., 2003).

In Iran also in accordance with the disciplinary committee secretary of the Central Council of the Ministry of Science, Research and Technology, highest number cases of cheating in exams is a student disciplinary committee (Quoted from the site Fararoo).

Despite the fact that most universities in the world, guidelines and codes of behavior for students have written, cheating and plagiarism are not clear for them. In many cases, most students do not read these policies. Academic integrity is one of the most important features that all educational institutions are trying to instill in all students take it. The assessment is an important aspect of the educational process. This aspect has been highlighted by many reputable people.

In addition, one of the leading causes of creating caravanserais along roads was the heterogeneity of people of that age. Local nomads and rebellious, villainous people of the mountains were troublesome to travelers and peddlers and demanded road tolls (Ghasemi & Farid, 2015, p. 27).

1.1 Widespread Cheating and Academic Dishonesty at the University

“Cheating and academic dishonesty” among graduate business students: The prevalence, causes and proposed solutions as research based on the responses of 5331 students in 32 colleges of higher education in the United States is doing. This study concluded that 56 percent of graduate business students—who are often MBA courses—in comparison with 47 percent of graduate students have cheated in non-commercial applications. On the other hand, although some universities about academic dishonesty, emphasizes this point that a post-graduate students and graduates in terms of ethical standards, should be higher and more righteous than undergraduate students (Hilliard et al., 2011, p. 5) also despite the difference between graduate programs and undergraduate students, we are still the subject of cheating and academic dishonesty in the face of undergraduate students.

Many studies have investigated amount of cheating undergrads and although results vary, in most cases accept (self-admission of cheating) cheating is very high (Sheard, 2002). High levels of cheating and plagiarism in recent studies has been registered. Graham and O’Brien, a study conducted on 500 college students and results showed 90 percent of admissions fraud (Owunwanne et al., 2010, p. 6).

Due to the high rate of participation in the cheating, the students believe that numerous cases of cheating are accepted. For example, a dishonesty on the campus of plagiarism is often done by students, but because of the ease of access to materials plagiarism, student’s plagiarism as a form of cheating are not classified. In order to properly analyze the prevalence of academic dishonesty might be better that first students understand what to consider as cheating or plagiarism.

For example, in a study at Howard University (Howard) was done in America, this turns out that 40% of students helping a friend or get help from a friend to complete homework outside of class—that can be done independently—not considered cheating (Owunwanne et al., Ibid). Similarly presentation of the work completed in the previous class to other classes of teachers many of whom will not be considered cheating.

1.2 Why do Students Cheat?

Emphasis on grades and academic performance in college students may fall into the trap of academic cheating. Scores only as a way to measure what students have learned the curriculum is not used, but also as a measure for concessions are different. Scores also can be used as motivation is very important for students to give their best performance of your expression.

This impression they need to succeed and win at any cost to (survival of the fittest) fuels. So scoring procedure for raising achievement and the pressures and expectations on students for success can be entered as an incentive for students to cheat.

The prevalence of cheating in an educational institution can contribute to the proliferation of cheating, when students know that other students can benefit fraud, they will be forced to cheat. Although universities try to ensure their students that all of them fair and equal opportunity to achieve success in their own college education. But because of the perceived “fair and equal opportunity” for a breakthrough, for it is impossible and unreal, to see justice in their cheating.

Because observers that academic cheating is done at all levels. At last year’s conference was held with the theme of increasing cheating in the UK higher education system, it was found that a quarter of British university students cheated in his exam and of these, only three percent when cheating is detected and dealt with seriously and law (Asr-e Iran, 2010).

What things is unclear concept of cheating and that fraud has led to confusion among many students. This confusion is easily turned into a justification and excuse for their implied that dirty. Studies show that, for example, plagiarism action based on fraud and dishonesty within the university, which is often done by students and yet because of the easy access to material from the Internet plagiarism, students plagiarism as a form of cheating are not classified (Owunwanne & Rustagi, 2010).

The factors that have been discussed so far, individual factors and the university, but in scientific and academic fraud, with the other two approaches can also be used to argue with. The first approach, the second approach is educational-ethical, social approach.

In the first approach, i.e., educational and moral approach, what is of interest to scientific ethics, respect for the traditions of academic, scientific training and scientific maturity. But about scientific training should be how to nurture a noted scholar. Although researchers have scientific training in the environment and have a student with whom finally, the extent to which the growth and development of its scientific expertise and efficiency have been. Scientific fraud occurs usually by those that have not had a proper scientific training.

Finally, scientific maturation process where a researcher over many years of research it is effective and based on the maturity of the credit finds that article, the arbitration papers and ... Those who have this maturity of over one hundred years old and want to create a cross-like approach, unfortunately, are among those who are infected more scientific fraud (Ahmadi, 2007).

The second approach to investigate irregularities and cheating in scientific, social approach. In this approach, dishonest people, not guilty and not guilty, but it is said that they are the victims of policies in a society that has been shaped over time.

2. Research Method

This semi-experimental study (experimental) has been done. In this way that first Test of English as a coordinator, among the various semesters of students come to the university in general English lessons and while a number of questions related to the fields of demographic, social and ethical. So their suspicion is not being questioned. In order to validate internal issue and make a real difference and create the potential for fraud and dishonesty among college students, tried to be consistent mid-term exam is tough as possible.

After conducting the tests, examination papers and then corrected by teachers without leaving anything on the score sheet instead of remaining securities is correct, students themselves returned to the key questions they are located and the students were asked to exchange their exams, they give the correct score. The difference between the actual score (score master) and the score given itself the level of dishonesty has nominated them.

It is obvious that all necessary measures have been taken at different stages of research students not take any suspicions to the test.

In terms of external validity refers to the generalizability of the results to the whole community should be pointed out that any results that may be obtained from a pilot project in terms of generalizability is limited (Delavare, 1993, p. 28). However, in this study we tried to learn a common language that all students from all university students, have been studied.

The experimental group consisted of students of various groups are studying medicine, engineering, basic science, agriculture and liberal arts university English class had eleven that 65% of them were female and 35 percent male.

3. Data Analysis

After data collection through questionnaires and student exam papers, in this section, we discuss data analysis. Analysis of the data obtained, first for the analysis of single variable data descriptive and inferential statistical methods and data at a later stage in the bivariate analysis, in terms of levels through tests measure the variables, the assumptions are very different.

3.1 Single Variable Analysis of Data

Gender

Among students, the proportion of girls is more than boys, so that more than two-thirds of the students are girls.

Age category

During the survey among students Minimum age 17 years and maximum 31 years.

Field of Study

The largest number (42.9) in Humanities have been suitable for the students of the humanities in college.

Place of residence

About two-thirds of samples among university students in Tehran and the third location in the city.

Language courses at the University ago

Among the students, 92% have stated that they have not already English course at the University. In contrast, less than 10 percent passed the course. It should be noted that this course for incoming students that score their language exam is offered a lesser extent.

Amount of interest in English

The results show that more than half (56.1 percent) of respondents are interested too high and in English and about 10% at very low and low interest rates have shown themselves in English.

Amount of interest in discipline

The vast majority of students in answering the question “What is amount of interest in educational field?” Have only expressed their field of study. In contrast, 10 patients (less than 5%) are dissatisfied with their study.

Evaluation of their sincerity

The majority of subjects in response to the question “To what extent do myself honest you know?” Have expressed their honest person. So that 71.4 percent high or too pointed, in contrast, less than 2 percent in low to very low and have noted amount of their sincerity.

Amount of individual perseverance

Results further questions about “how do you assess your assiduous?” indicates that the proportion of students who have announced their persistence little more than those who have expressed their full effort. Nearly half of students (50 percent) said they are a little perseverance.

Language course grade students

According to the results announced by the scores of teachers expressed 21.4 and the mean scores of the students is equal to or 23.1. So there is an average of the two scores.

Amount of integrity of the results report

According to the survey of 280 students study results showed, more than 62 percent of students said their score to master, absolutely honest, 26.6 percent have little integrity and honesty do not comprise the rest.

3.2 Analysis of Bivariate Data

3.2.1 Relationship between Sex with Honesty

The results of the tests, chi-square and v Kramers, honesty about relationship between sexes with students with language lessons to master the score, show that the integrity between the male and female in this regard is not much different view. As can be seen from 60.7 percent among girls, and the boys were 66.3 percent completely honest.

Also, among those who are not at all honest, i.e., those who have announced to her teacher score 11 score over 4 percent of girls and 4.3 percent of the students are boys. Therefore statistical correlation does not acknowledge ($s=0.7$). Of course, using two independent samples t parametric test also confirmed this finding does not, because the average score of dishonesty girls at 1.9, and 1.5 is equal among boys ($t=0.9$; $s=0.37$).

Table 1. Status honesty males and females

Total	Without honest	Very low honest	Low honest	Completely honest	Gender/honesty
100	4	7.3	28	60.7	Girl
100	3.4	5.6	24.7	66.3	Boy

Note. $s=0.84$, $v=0.05$, $x^2=0.8$.

3.2.2 Concerning the Age Group with Amount of Honesty

The results of the tests, chi-square and v Kramers age group with amount of honesty of the relationship has not been confirmed. As can be seen, 66.2 percent of students 18 and under, 67.4, 19 percent of students and 55.6 percent of students 20 years old and most were honest in expressing score to master. Of course, as is clear in the dispute is not so much to cause a significant relationship is honesty. Therefore statistical correlation does not acknowledge ($s=0.49$).

Table 2. Honesty status of students by age group

Total	Without honest	Very low honest	Low honest	Completely honest	Age/honesty
100	2.6	5.2	26	66.2	18 years old and lower
100	5.6	5.6	21.3	67.4	19 years old
100	2.8	13.9	27.8	55.6	20 years old and more

Note. $\chi^2=5.3$, $s=0.49$, $v=0.11$.

3.2.3 Relationship Place of Residence with Honesty

The results of the tests, chi-square and v Kramers location relationship with the students is a significant amount of dishonesty. As can be seen, amount of people honesty is not much different, but more significantly low and very low on people's honesty, so that 14.9 percent of students in Tehran, and 5.7 percent of county students amount of their rights is very little and not at all. Of course, using two independent samples t parametric test also confirmed this finding does not. This finding means that students cannot be true but county average of dishonesty against 2.05 Tehrani students, and among county is equal to 1.6 ($t=0.9$; $s=0.37$).

Table 3. Honesty status of students in terms of place of residence

Total	Without honest	Very low honest	Low honest	Completely honest	Resident/honesty
100	3.2	11.7	23.4	61.7	Tehran
100	5.7	-	27.1	61.7	Small cities

Note. $\chi^2=9.4$, $s=0.02$, $v=0.20$.

3.2.4 Relationship Interested in English with Honesty

The results of tests on the relationship Chi and Gamma interest in English, has been a significant amount of honesty in declaring the master score. This finding means that the interest of the people to learn more languages, the score also decreased their dishonesty and conversely the fewer people said they only lack of honesty is true.

Table 4. Status honesty by degree of interest in English

Total	Without honest	Very low honest	Low honest	Completely honest	Interest/honesty
100	28.6		14.3	57.1	Very low
100	7.1	-	35.7	57.1	Low
100	3.6	9.5	27.4	59.5	Approximately
100	2.6	6.4	37.2	53.8	High
100	1.8	8.8	10.5	78.9	Very high

Note. $\chi^2=28.4$, $s=0.005$, $G=-0.18$.

3.2.5 Evaluation of Perseverance Relationship with Honesty

The results of the tests Chi and Gamma, about his relationship with the student's evaluation of amount of persistence to master amount of honesty in declaring score does not show meaningful relationship. This finding means that the individual's assessment of his perseverance does not affect amount of honesty of the announced score.

Table 5. Honesty status of students in terms of evaluation of perseverance

Total	Without honest	Very low honest	Low honest	Completely honest	perseverance/honesty
100	-	8.8	29.4	67.8	Very low
100	6.2	9.9	25.9	58	Low
100	4.4	4.4	26.4	64.8	Approximately
100	-	10.3	31	58.6	High
100	-	-	-	100	Very high

Note. $\chi^2=9.6$, $s=0.64$, $G=-0.08$.

3.2.6 Relationship with Amount of Honesty Objective Assessment of their Sincerity

The results of the tests Chi and Gamma, about the relationship between students' evaluation of amount of honesty with honesty in the declared objective amount of the master score does not show meaningful relationship. This finding means that amount of individual's assessment of his integrity and honesty in operation with no impact score.

Lack of significant of this content, is because of the 280 students surveyed, only one person amount of your honesty very little and three people others have announced at least in part, have pointed to high and very high. So we can conclude there is no difference between opinion and behavior of individuals in the norm honesty.

Table 6. Honesty objective situation of students depending on their evaluation of their sincerity

Total	Without honest	Very low honest	Low honest	Completely honest	Evaluation/honesty
100	-	-	-	100	Very low
100	-	-	66.7	33.3	Low
100	4.5	10.6	28.8	56.1	Approximately
100	4.3	5.1	25.6	65	High
100	1.9	9.6	25.0	63.5	Very high

Note. $\chi^2=7.6$, $s=0.88$, $G=-0.10$.

From a sociological perspective, this phenomenon can be cleaned with a double meme and the "goal-directed action" and "value-oriented action" be analyzed. A distinction between these two types of action, based on the duality of human behavior that is hard to understand. In most cases, this distinction only exists in the mind of the observer that is, if the observer feels that immediately understands the behavior of others, his attitude is that rational describe this behavior and instead, in cases where else in his behavior are ambiguous and unclear, it is his tendency to interpret it unreasonable or irrational.

But this axiom should be noted that: Individual actions are not understood except in reference to the social context within which they are located or either expressed more precisely by reference to the construction of the interactions that are involved with it. Behavior, social factors cannot be understood except by recognizing the mutual interaction in which they are located.

Each of acting on the basis of personality, attitudes towards risk, its claims, information about their location data and situational variables that undoubtedly part of it is dependent on social interaction and social history, trying to make the most appropriate decision in relation to its interests, as it detects up (Bodon, 1991, pp. 6-31).

In accordance with this sociological axiom can be said to be acting alone (here student) does not operate in a vacuum or social institution and he continues to act in a context of social constraints and factors and data flows that are imposed on him.

Once in the environment (university, class) cheating deterrent mechanisms do not exist or are weak, or in the broader community levels witnessed scenes of widespread immorality and injustice in our society, or social mobility system is not based on merit or as already mentioned, with tricks and lies of those in power and influence for their symbolic capital and make fake documents and titles, should be expected to focus on the value

of moral action (scientific integrity) are goal-oriented rational action (cheating and dishonesty academic) to be converted.

Student in a position to decide that portray yourself as an honest (in terms of value), and in a position to try and compete especially in a situation that can be reasonably low, decides that reaches any loss by any means to bring him to his goal.

Select the most appropriate means (not suitable in terms of the values of society), i.e., dishonesty and cheating to achieve the goal (passing the exam) rational action toward the same object and of course this, i.e., students have the character actor as well that in the process of socialization within the family, schools and the media environment and shape and his experience and knowledge of this environment in dual action, he is effective. Dual action (the gap between theory and practice or pretend to be something or act contrary to it), but unfortunately the generalized problems of our society.

4. Conclusion and Recommendations

Scientific ethics, commitment to strive for innovation and change in the areas of social life and to open the doors of knowledge and understanding of the dynamic of social issues to the members of the community, one of the anomalies of the ethical and scientific fraud and dishonesty in scientific research and deliberation, the University is. In principle, the practical ethics of individual personal beliefs about what is right or wrong in what position is defined and rooted in socialization and acculturation of individuals within families, schools and other social institutions.

This study sought to is that dishonesty assesses students in a quasi-experimental design. Of course, academic dishonesty, plagiarism is the most common variety, i.e., presentation of the work of others as their own work, without citing sources, helping a student to another, provide a working simultaneously in different courses without teachers, earning the questions or answers are unauthorized and more.

In this study, dishonesty and manipulation of the facts were examined. In this way the first test of English at mid-term are harmoniously the various university students in English courses taken public and while a number of questions related to demographic, social and ethical fields were also questioned.

After doing so stringent tests, examination papers by the respective professors correction and then, without a trace of the score and correct papers on board rather than be left, returned to the students and provide them with the keys to your questions, correct their paper and their score Master announced. The difference between the actual score (the master) and score of the students to have their own, amount of dishonesty it has set.

According to the survey of 280 students, more than two-thirds of them in with your score Master of honesty have shown (150), and in front about 38 percent of the students (N=130) did not have the necessary integrity. Average scores announced by the teachers (actual score) 21.4, and in front of scores announced by the students is equal to 23.1. So there is an average of the two scores.

Two-variable analysis data also suggest that amount of integrity of students according to gender, does not reveal much difference, but among those who have severe dishonesty (those who score 11 more than the professor said to him), 4% of girls and 3.4 percent of the students are boys. The relationship accommodation (Tehran and other cities) and also amount of interest in English, with honesty in students is significant and some variables such as age, individual assessment of their perseverance, they have not shown a significant relationship with amount of truth.

Finally, the results of the tests Chi and Gamma about the relationship between students' evaluation of amount of sincerity with sincerity in the declared objective amount of the master score does not show meaningful relationship. This finding means that amount of individual's assessment of his integrity and honesty in operation with no impact score.

Lack of significant of this content is because of the 280 students surveyed, only one person amount of your integrity as too little and too low in the three stated and the rest on the surface to some extent, have pointed to high and very high. So we can conclude there is no difference between opinion and behavior of individuals in the norm honesty. This is also a function of the overall state of society represents the gap between theory and practice or manifestation and action.

In the end, we must point out again that cheating and academic dishonesty, however, one of the fundamental issues of education and universities. Giving false and extreme value for the score and achievement and neglect of the educational and moral aspects of university system—which will allow the development community provides its desirable path, this anomaly is likely to increase to follow. To prevent this situation will have no choice:

Firstly, balance personality and methods of education programs and students, to teach and what the university system and the system of education in school is heavier. Because otherwise students today fraudulent, dishonest people in public life will be tomorrow.

Secondly, although according to some experts, university culture due to the unique environment of complex and its decentralized structure, in creating an ethical environment creates challenges (Weber, 2006, p. 24), but despite this complex environment, the creation of a code of conduct serves as a deterrent to fraud. Unfortunately, we do not have country code academic community. Having a code of conduct and of life in a scientific culture is important for any institution and our universities can also conduct regulations and conditions are available on their sites.

These regulations shall be considered as a contract between the University and the student will clearly evident violations of science, can even register incoming students, especially graduate-level courses or exams postponed to the period in which it issues, related to scientific ethics, academic honesty, contrary cases of scientific, various instances of plagiarism and fraud, as well as the relevant penalties.

Finally, academic institutions, in addition to punishment-based mechanisms, methods for build a moral society, including specific communication rules and standards, social ethics, academic community members and mutual respect between students and teachers and professors who instead of punishment, students are certain advantages.

For example, exams open source (Open Book) without the presence of the invigilator or Self-Scheduled exam can create moral community, act as a hidden curriculum, where students get tips informal according to ethical issues and the incentive mechanism, in ethics and other ethical issues of their institution participate.

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Examining the Effectiveness of Social Skills Training on Loneliness and Achievement Motivation among Nurses

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Abstract

This study tries to examine the effectiveness of social skills training on feeling of loneliness and achievement motivation in nurses. The present research is an experimental study of pre-test and post-test design with a control group. The research instruments included the revised UCLA Loneliness Scale and the Achievement Motivation Test for adults. The sample size consisted of 40 nurses working in Imam Khomeini Hospital in the city of Ahvaz selected through multi-stage random sampling and assigned to two experimental and control groups. To this end, prior to teaching the social skills, both groups were pre-tested. Then, the experimental group received social skills training for 12 fifty-minute sessions but no training was provided to the control group. Upon the completion of the training course, both groups immediately took the post-tests. The results of one-way analysis of covariance (ANCOVA) and multivariate analysis of covariance (MANCOVA) showed that social skills training significantly increased achievement motivation and reduced feeling of loneliness in nurses.

Keywords: social skills, loneliness, achievement motivation, nurses

1. Introduction

When challenges and problems arise, access to resources and skills that can help an individual to overcome them to the best can be comforting. In this respect, social skills are a set of acquired abilities which enable a person in a social context to interact with appropriate forms and through required capabilities. Of the most commonly known social skills are self-assertiveness, coping strategies, skills of communication and finding friends, interpersonal problem-solving skills, and abilities to regulate cognitions, emotions, and behaviors in an individual. In addition, in order to have positive feelings about themselves, adolescents should have the skills necessary to be with others. Teenagers uncertain about themselves could approach others with lots of doubt and therefore they might use not as much of their social skills. Therefore, if adolescents have the abilities to interact successfully with others, these new capabilities can increase their social self-esteem (Pope, McHale, & Craighead, 2002; translated by Tajjali, 2006). Acquisition of social skills by children is also considered as a part of their socialization in which norms, skills, values, attitudes, and behaviors are shaped to help them to play their current or future roles in society and family properly. In this respect, other social institutions such as schools are taken into account as the most important socialization factors which are examined in terms of social values and norms (Heiman & Margalit, 2000).

Elhageen (2004) considered loneliness as an obnoxious, disturbing, and unpleasant experience that makes teenagers feel inferior and get through an uncomfortable mood. Feeling of loneliness arises when there is a difference between types of interpersonal relationships a person expects for in the future and the ones an individual has at present. An investigation by Nangle and Michael (2002) revealed that there is a negative relationship between social skills and levels of loneliness.

In the theoretical models proposed for achievement motivation, beliefs of an individual are considered as the main and the basic determining factors affecting achievement behavior (Wigfield & Eccles, 1992). In all these models, it is assumed that people's expectations for achievement and their perceptions of abilities to perform different tasks play major roles in their behavioral motivation. Achievement motivation refers to the desires to succeed and participate in activities whose fulfillment depends on personal efforts and abilities (Slavin, 2006; translated by Seyyed Mohammadi, 2006). Achievement motivation has been also considered for all individuals and almost all nurses. In this respect, failure will naturally bring about occupational anxiety and sometimes

causes other psychological problems for nurses in terms of career achievement (Shoari, 1997). Hermans (1970; cited in Sabooteh, 2010) stated that achievement motivation was the tendency to perform tasks in the best form based on a person's and others' attitudes. In his view, such a social dimension of achievement motivation showed the effectiveness of social skills on this construct. Furthermore, a research study by Turner, MacDonald, and Somerset (2008) indicated that social skills training can lead to increased achievement motivation.

Given the social dimension of the constructs of loneliness and achievement motivation, social skills training can also have its own effects. Considering the leading role of nurses in society, it seems essential to focus on the impact of social skills training on nurses. Therefore, the present study was to investigate the effectiveness of social skills training on loneliness and achievement motivation.

2. Research Method

2.1 Population, Sample, Sampling Method

The study sample included 40 nurses who had voluntarily participated in the present research. They were asked to complete the revised UCLA Loneliness Scale and the Achievement Motivation Test for adults. To this end, nurses who had received scores higher than the cut-off point (80) for the revised UCLA Loneliness Scale and scores lower than the cut-off point (60) from the Achievement Motivation Test for adults were randomly selected and thus 40 licensed nurses as volunteers were selected for the second phase of the study. Then, out of the sample selected, 15 individuals were placed in the control group and 15 people were assigned to the experimental group.

2.2 Research Design

The present study was of an experimental field research type including pre-test and post-test with a control group. Before starting training sessions, both experimental and control groups were pre-tested. Then, the experimental group was trained in terms of social skills, but the control group received no training. After completing the training course, both groups immediately took Bart post-tests, Russell and Peplau Revised UCLA Loneliness Scale, and Hermans Achievement Motivation Test.

2.2.1 Russell and Peplau Revised UCLA Loneliness Scale

To assess the feeling of loneliness, the Revised UCLA Loneliness Scale was used. This scale was developed by Russell and Peplau (1978) and it was revised by Russell, Peplau, and Curtona (1980) (Bas, 2010). The scale was comprised of 20 items based on four-point Likert-type scale including *never* (1), *rarely* (2), *sometimes* (3), and *often* (4). Items 1, 4, 5, 6, 9, 10, 15, 16, 19 and 20 were scored in reverse order. Higher scores from this questionnaire indicated that feeling of loneliness was high. A number of measures of reliability including test-retest reliability (0.73) and alpha coefficients (0.79 to 0.94) have been reported for this questionnaire (Russell, 1996; Ahadi, 2008). Furthermore, Pasha and Ismaeeli (2006) in their studies used Cronbach's alpha and split-half method to determine the reliability of this questionnaire and estimated the values by 0.75 and 0.71, respectively. They also measured the validity of this scale through its correlation with an anxiety questionnaire which was equal to 0.4. In this study, Cronbach's alpha coefficient was 0.69 and the split-half reliability was equal to 0.71.

2.2.2 Hermans Achievement Motivation Test

Hermans Achievement Motivation Test (1970) was one of the paper-and-pencil questionnaires to assess the needs for achievement. The initial test included 92 items out of which 29 items assessing 9 components were selected as the final Achievement Motivation Test following its pilot study, analysis of the items, and the inter-correlation between the individual items and the whole test. Hermans Achievement Motivation Test included 29 items written in the form of incomplete statements. For each item in the questionnaire, there were also 4 options. In this study, Cronbach's alpha coefficient and split-half reliability of the questionnaire were 0.65 and 0.75, respectively.

2.3 A Summary of Training Sessions

The intervention was administered to nurses for 12 fifty-minute sessions and two training sessions per week in Imam Khomeini Hospital in the city of Ahwaz. The nurses in the experimental group were asked not to share the contents of the social skills training course with other nurses in the control group. It should be noted that the control group did not receive any training in this respect.

Session One: Administration of pre-tests for the experimental group and the control group, introductions and familiarity with group members, delineation of rules and regulations for the groups, discussions about the

importance of social skills, feedbacks from individuals in terms of the method of introduction, voice tone; and finally tasks on how to introduce themselves to others.

Session Two: Reports and feedbacks on the tasks of the previous session, methods of introduction and greetings in order to interact with others, talks about verbal and non-verbal skills; training in terms of the ways to acknowledge, admire, develop conversations, and use the verbal language; and finally tasks on both verbal and non-verbal skills.

Session Three: Reports and feedbacks on the tasks of the previous session, methods of daily offer exchange; practice on how to start, continue, and end conversations; practice on how to listen, and finally tasks on how to start and continue conversations.

Session Four: Reports and feedbacks on the tasks of the previous session, discussions about the importance of compliance with the rules and regulations at school and at home, and finally tasks on order and discipline.

Session Five: Reports and feedbacks on the tasks of the previous session, practice on how to demand from others, providing a model on how to deal with a person who has declined requests, requests for and rejections of unreasonable demands in order to meet individual and social needs and become familiar with their own rights, tasks of compliment and appreciation of family and friends, and finally tasks on unreasonable demands and rejections by other individuals.

Session Six: Reports and feedbacks on the tasks of the previous session, discussions about the importance of getting permission from the elderly in doing things, listening skills through proper tasks.

Session Seven: Reports and feedbacks on the tasks of the previous session, teaching skills related to inhibiting the expression of feelings (positive and negative) and emotions through suitable tasks.

Session Eight: Reports and feedbacks on the tasks of the previous session, practice on how to express emotions; presenting a model on how to express various emotions such as happiness, anger, sadness; teaching skills to ask for help and to help others through proper tasks.

Session Nine: Reports and feedbacks on the tasks of the previous session, training for the ways to refuse unreasonable demands, talks about how to say “no” to unreasonable requests, tasks on how to refuse unreasonable demands, and finally tasks on refusal skills.

Session Ten: Reports and feedbacks on the tasks of the previous session, talks about the reasons why we should criticize, tasks on how to provide feedback to others, and teaching the skills of expressing and accepting apologies.

Session Eleven: Reports and feedbacks on the tasks of the previous session, practice on accepting criticisms, providing a model on how to deal properly and effectively with criticisms, practice on expressing positive feelings to others, identification of underlying factors affecting unreasonable beliefs, methods of coping with verbal and non-verbal humiliations, tasks on how to respond verbal and non-verbal humiliations and accept criticisms, and teaching problem-solving skills and those related to coping with failure. Finally, reports and feedbacks on the tasks of all the previous sessions and providing a summary of the contents presented as well as reviewing and evaluating the results of the sessions.

Session Twelve: Administration of post-tests for the experimental group and the control group.

3. Research Findings

3.1 Descriptive Findings

The findings of this study included descriptive statistics (mean and standard deviation) shown in Table 1 along with the number of sample subjects for all the variables in this study.

Table 1. Mean and standard deviation scores for loneliness and achievement motivation of experimental and control groups in terms of pre-tests and post-tests

Variable	Phase	Statistical indicator	Mean	Standard deviation	Number
		group			
Loneliness	pre-test	experimental	51.90	8.02	20
	post-test	control	50.85	2.08	20
	pre-test	experimental	31.60	5.37	20

	post-test	control	50.80	2.09	20
Achievement motivation	pre-test	experimental	76.50	5.52	20
	post-test	control	77.10	5.31	20
	pre-test	experimental	91.95	6.81	20
	post-test	control	74.05	6.03	20

As it was illustrated in Table 1, the mean and the standard deviation scores of the pre-tests administered to the groups in terms of the variable of loneliness were 51.90 and 8.02 for the experimental group and 50.85 and 2.08 for the control one. Such scores for the post-tests were 31.60 and 5.37 for the experimental group and 50.80 and 6.03 for the control group. Moreover, the mean and the standard deviation scores of the pre-tests administered to the groups in terms of the variable of achievement motivation were 76.50 and 5.52 for the experimental group and 77.10 and 5.31 for the control one. Such scores for the post-tests were 91.95 and 6.81 for the experimental group and 74.05 and 6.03 for the control group.

3.2 Findings of Research Hypotheses

Hypothesis 1: Social skills training have an effect on reducing feeling of loneliness in nurses.

Hypothesis 2: Social skills training have an effect on increasing achievement motivation in nurses.

Table 2. Results of multivariate analysis of covariance (MANCOVA) on post-test scores of loneliness and achievement motivation in nurses in the experimental and control groups through the control of the pre-test

Test	Value	DF hypothesis	DF error	F	(p)	Eta-squared	Statistical power
Pillai's trace test	0.919	2	33	124.89	0.0001	0.90	1.00
Wilks's lambda distribution test	0.081	2	33	124.89	0.0001	0.90	1.00
Hotelling effect test	11.35	2	33	124.89	0.0001	0.90	1.00
Roy's greatest root test	11.35	2	33	124.89	0.0001	0.90	1.00

According to Table 2, through the control of the pre-tests, the significance levels of all the tests indicated a significant difference between the nurses in the experimental and control groups in terms of at least one of the dependent variables (feeling of loneliness and achievement motivation) ($p < 0.0001$ and $F = 124.89$). To realize the fact which variable makes a difference between the two groups, two one-way ANOVA tests were conducted in the context of MANCOVA whose results were provided in Table 2. The effect size or the difference was equal to 0.90; in other words, 90% of individual differences in the pre-test scores of feeling of loneliness and achievement motivation were associated with the effect of social skills training (group membership). Statistical power was also equal to 1.00, i.e., there was no probability of a Type II error.

Table 3. Results of one-way ANCOVA in the context of MANCOVA on post-test mean scores of loneliness and achievement motivation in nurses of the experimental and control groups through pre-tests control

Variable	Source of variance	Sum of squares	df	Mean of squares	F	p	Eta-squared	Statistical power
Feeling of loneliness	pre-test	1.63	1	1.63	0.096	0.759	0.01	0.060
	group	3133.36	1	3133.36	183.49	0.0001	0.84	1.00
	error	597.65	35	17.07				
Achievement motivation	pre-test	25.22	1	25.22	0.588	0.448	0.01	0.116
	group	2847.38	1	2847.38	66.34	0.0001	0.65	1.00
	error	1502.07	35	42.91				

As presented in Table 3, controlling pre-tests between nurses in experimental and control groups revealed a significant difference in terms of loneliness ($p < 0.0001$ and $F = 183.49$). Therefore, the first hypothesis was confirmed. In other words, given the mean scores for feeling of loneliness among nurses in the experimental group compared with those of the control group, it was concluded that social skills training reduced levels of feeling of loneliness among the individuals in the experimental group. The effect size or the difference was equal to 0.84, in other words, 84% of individual differences in the post-test scores of loneliness were related to the effect of social skills training (group membership). Statistical power was equal to 1.00, i.e., there was no probability of a Type II error.

Moreover, controlling pre-tests between nurses in experimental and control groups in terms of achievement motivation led to a significant difference ($p < 0.0001$ and $F = 66.34$). Thus, the second hypothesis was confirmed. In other words, considering the mean scores of achievement motivation among nurses in the experimental group compared with those of the control group, it was concluded that social skills training increased achievement motivation of the nurses in the experimental group. The effect size or the difference was equal to 0.65, in other words, 65% of individual differences in the post-test scores of achievement motivation were associated with the impact of social skills training (group membership). Statistical power was equal to 1.00, i.e., there was no probability of a Type II error.

4. Discussion and Conclusion

Based on the statistical results presented in the previous section, the first research hypothesis regarding the effectiveness of social skills training on reducing the feeling of loneliness in nurses was confirmed.

These findings revealed that as social skills improve in individuals, their feeling of loneliness declines. These results were consistent with the findings of Cadish, Vertoman, and Braspening (2011) and Heidar, Maskak, and Darvishi (2009). These researchers believed that social skills training could reduce the feeling of loneliness in individuals. To explain these findings, it can be stated that one of the main elements of loneliness is social hatred or experience of losing relationships with social environment which leads to an obvious consequence, i.e., feeling of loneliness (Anderson, 1986). Therefore, it became clear to a large extent that one of the factors affecting a person's feeling of loneliness was lack of healthy and effective social relationships. Of course, this relationship could be bi-directional, which means that higher levels of feeling of loneliness could lead to reduced social skills. Therefore, when an individual enters into loneliness or isolation, they suffer from reductions and interruptions in their social relationships and they are entangled in a defected cycle which is hard to get rid of. Consequently, the most important factor used to overcome the feeling of loneliness is social relationships and participation in social events.

Moreover, it can be said that through increasing the levels of social skills, an individual can benefit from the advantages of social relationships such as support and intimacy. Obviously, when individuals take advantage of such benefits, they are encouraged to maintain their social relationships to have such benefits in the long term. On the other hand, teaching appropriate social skills and providing opportunities and experiences which result in increased social interactions helps nurses to practice and employ social skills and strategies in all their real-life situations and contexts, and consequently get through lower levels of anxiety.

Finally, according to Heinrich (2006), feeling of loneliness comes when there is a difference between interpersonal relationships that an individual expects for in the future and the ones someone already has at present. Perceptions of a person towards oneself and others' characters can have effects not only on how to interact with others but also how to interpret interpersonal situations. Therefore, social skills training can help an individual to become aware of realities and mutual expectations in social relationships and then leads to a decline in the levels of isolation and feeling of loneliness.

Furthermore, the second research hypothesis, i.e., the effectiveness of social skills training on increasing achievement motivation in nurses was confirmed.

These findings revealed that as social skills in individuals improve, achievement motivation intensifies. These results were in line with the findings of Jamshidi and Naraghi (2005) as well as Turner, McDonald, Somerset (2008). According to these researchers, social skills training can improve achievement motivation in individuals. To explain these findings, it can be stated that search for understanding affairs and causes is the most important source of human motivation (Weiner, 1980). Hence, people are looking for the ways to explain events and the cause-and-effect relationships between them. Since social skills are a set of behaviors acquired through observation, modeling, practice, and feedback with interactive aspects, they can maximize social reinforcement. So this can be a significant factor in strengthening the incentives for achievements in individuals. It can be said that improving levels of social skills leads to a rise in individual efforts in order to achieve common objectives

and social activities. Such an increase in partnerships and activities can result in a variety of motivations including achievement motivation. Given that increased social skills result in the growth of the factors affecting the process of learning, an individual's character, past experience, and interpersonal interactions can help someone to achieve their goals. Therefore, increased social skills can lead to a rise in the direction of following the goals which is among the important aspects of motivation. Finally, it can be stated that social isolation in youth can have long-term and serious effects on an individual's psychological health in adulthood. Thus, helping outcasts and isolated individuals as well as teaching social skills can lead to developments in character and mental health as well as the formation of an appropriate context for the growth of achievement motivation.

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A Case Study in Left Wing Neo-Populism: The Rise of the Syriza Party in Greece

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Abstract

This research considers three approaches to the study of populism: populism as an ideology, populism as a discourse, and populism as a strategy. We highlight the debates between these different approaches. Next, we take the most significant definition from each of the three approaches and rethink how populism as an ideology should be defined as fundamentally rooted in popular sovereignty. We then ground this discussion by applying each approach to a recent phenomenon in the European political arena, the Syriza party. Finally, we use discriminant analysis to identify the distinguishing characteristics of a Syriza party supporter. We find that this party's supporters are less critical of the European Union, younger and more leftist than other recent neo-populist parties in Europe.

Keywords: populism, Greece, Syriza party

1. Introduction

It has been argued that the term “populism” originated in the United States by the self-identified populists of the People's Party of the 19th century, which emerged as an agrarian response to the crop-lien system and industrialization (Houwen, 2011). In today's nomenclature, populism is often used in a pejorative manner by scholars, pundits, and politicians alike. This shift in connotation has roots with sociologist Edward Shils (1956, pp. 98-103) who equated populism with Nazism and McCarthyism, calling them “an irrational protest ideology”. A decade later, Richard Hofstadter (1964) reinforced the negative connotation associated with populism, by arguing that “the People's Party had mobilized irrational hostilities, i.e., elements of anti-Semitism and generalized xenophobia against immigrants” (p. 19).

Despite this negative view of populism, some scholars have argued that, in fact, populism is inherently democratic. Goodwyn (1976) presents populism as something intrinsically democratic—an act of popular sovereignty that is by definition, democratic. Grattan (2014) identifies two differing views on populism: supporters (radical democrats) and critics (liberal critics). As such, populism can be a corrective democratic force or conversely, it can be perceived as an anti-democratic act of tyranny by a majority.

2. Populism as an Ideology

Populism as an “ideology” emphasizes the “moralization” of the antagonistic relationship between “the people” and “the other”. The “moral” element has roots in Edward Shils's (1956) definition of populism. Shils proposes a gamut of questions and statements regarding both populism and populists, and he makes a vigorous and negative account of populism. He describes the will of the people who are “impatient” with “bureaucratic red tape” and that ultimately, “the people” are better than “their rulers and the urban middle classes” (pp. 1-5). Similarly, Ionescu et al. (1969) conclude that populism “worshipped the people” and that the people were the meek and miserable. These authors also pondered whether populism transformed or was absorbed into other ideologies or movements such as nationalism, socialism, and peasantry. Canovan (1981) outlined agrarian populisms and political populisms. She describes agrarian populisms as farmers' radicalism (i.e., U.S., 19th century People's Party), peasant movements (i.e., Eastern European green rising) and intellectual agrarian socialism (the Russian narodniks). As for the political populisms she describes populist dictatorships (i.e., Peron), populist democracy (i.e., calls for referendums), reactionary populism (i.e., George Wallace), and politicians populism (i.e., broad non-ideological coalition building that draws on the unification appeal of “the people”). In a later work, Canovan

(2002) constructs an ideological understanding of populism. She challenges the “discourse” approaches because, as she says “populism has a characteristic of core concepts that it asserts, priorities and decontests—democracy, popular sovereignty, the people [...] these cannot be dismissed as empty rhetorical flourishes” (p. 33).

Mudde (2004) argues that both of these conceptions miss the core attributes of what populism actually represents. Indeed, Mudde argues that almost all definitions have “at least two points of reference in common: ‘the elite’ and ‘the people’” (p. 543). Therefore, Mudde argues for a new definition and puts forward a concept that includes only the “necessary and sufficient” conditions that promote low “intension” and “high” extension. In other words, a definition narrow enough to avoid Laclau (2005) argument that all politics is a degree of populism, but broad enough to capture a wide array of parties. Mudde states: “I define populism as an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, ‘the pure people’ versus ‘the corrupt elite’ and which argues that politics should be an expression of the *volonté générale* (general will) of the people. Populism, so defined, has two opposites: elitism and pluralism. Elitism is populism’s mirror image: it shares its Manichean worldview, but wants politics to be an expression of the views of the moral elite, instead of the amoral people. Pluralism, on the other hand, rejects the homogeneity of both populism and elitism, seeing society as a heterogeneous collection of groups and individuals with often fundamentally different views and wishes” (p. 543).

Stanley (2008) argues for a “thin” ideology of populism. He states that populism is “an ideology articulated by political agents in the attempt to mobilize ‘the people’” (Stanley, 2008, p. 98). Stanley goes on to define the core concepts of populism: 1) the existence of two homogenous units of analysis, “the people” and “the elite”; 2) the antagonistic relationship between the people and the elite; 3) the idea of popular sovereignty; and 4) the positive valorization of “the people” and the denigration of “the elite” (p. 102).

Van Kessel (2014) utilizes a ladder of abstraction, “the basic idea is that concepts higher on the ladder have fewer properties and are, therefore, applicable to more cases”. He argues that at the most abstract level populism is mere discourse, and conversely, while at the most intension populism is a “thin” ideology, which can be found in forms such as “populist radical right” or “social populism” (Ibid., pp. 111-112). Perhaps Van Kessel’s boldest contribution, however, is his prescription for what not to do: 1) do not use the adjective of populism when a case only complies with some of the components of populism; 2) do not use populism as a “descriptor” when a political actor expresses discourse that complies with a minimal definition of populism; 3) do not stay on this level of abstraction if populism is not a lasting constituent feature of the political party or movement, or when the study merely means to analyze degrees of populism; 4) do not use populism as a “classifier” when populism is an essential characteristic of a political actor and when the study refers to a case within an exclusive category of populist actors, such as “populist parties” (pp. 112-113).

3. Populism as a Discourse

Discourse denotes “all ‘systems of meaningful practices’ that form the identities of subjects and objects through the construction of antagonisms and the drawing of political frontiers” (Stavrakakis & Katsambekis, 2014). Therefore, this section examines both discursive analysis and “historicist” or “constitutive accounts” of populism. Laclau (2005) describes a theoretical process by which populism emerges out of the discourse of “social demand” which he argues in logic of difference and equivalence in the discursive field. Panizza (2005) offers a collection of authors take on populism in three broad categories: empirical generalizations, historicist accounts and symptomatic readings. He aims to understand populism in the context of three key questions: Who are the people? Who speaks for the people? And how does populist identification take place (pp. 1-2)? Lowndes (2005) offers a “historicist” account of populism by employing an anti-naturalist concept formation to build a narrative about 20th century populism in the American south. While Lowndes does concede some “definitional” characteristics of populism, such that “populist discourse assumes a homogenous notion of the people” and that “populist leaders claim an immediate identification between themselves and those they represent” he qualifies this by saying that “the emergence of right-wing populism can be reduced neither to historical determinacy nor to a radical contingency of the political moment”.

Comaroff (2011) argues that populism is a “shifter” which is a term used by linguists to describe a word which has no meaning except when in reference to the message. Comaroff (2011) elaborates that populism is almost always used “in opposition to what is defined, by contrast, as elite, exclusive, or establishment, its deployment being more about marking difference than denoting content” (p. 100).

4. Populism as a Strategy

Populism as a “mobilization and organizational strategy” is distinguished from the other two approaches discussed, because it puts a special emphasis on the organizational structure of populist movements and the relationship between “the people” and the leader. This is in contrast to both the ideological and discourse approaches because they are not concerned with a “charismatic leader”. Second, the strategy approach often invokes both discourse and ideological notions to operationalize their conception of populism as a mobilization strategy. Third, a distinction can be made regarding the nature of the definitions themselves, both the ideology and discourse approaches—where they exist as such—are “theoretical” while the strategy approach has a much stronger tendency to be an “operational” definition.

Weyland (2001) argues that populism is a political strategy, with two sub-types, which is differentiated by what constitutes “the people”. At the core of any populist strategy, according to Weyland, is a leader, which is necessarily reliant on mass support. However, that mass support can come in two forms, in the language of Rousseau, the *volonté général* or *volonté des tous*, the general will or the aggregation of private individuals. Notably, Weyland argues that more-or-less that “classical populism” of the 19th and early 20th century is more like the “general will” while “neo-populism” is a phenomenon starting around the 1980s. Zaslove (2008) explicitly sidesteps the debate about whether or not populism is an ideology, yet he does conceive of an “ideal” condition for populism described as such:

“I divide the populist ideal into two parts: the discourse of populism and the institutional form of populism. The discourse pits the common every day, virtuous, and homogenous people against both elites (politicians, intellectuals, the media) and perceived outside threats (special interest groups, immigrants, feminists, ecologists) [...] a charismatic and populist leader who claims to possess a direct and unmediated relationship with the people [...] this leads to a centralizations of leadership and a low level of party institutionalization [...] to be sure, not all populist parties or movements meet all the demands of the ideal type. But in order for a populist party to be considered populist it must adhere as closely as possible to this ideal type” (pp. 323-324).

This definition is actually quite comprehensive in both its account of the perceived ideology of populism while still paying attention to the operational side of how populism manifests. It retains the core of Mudde’s definition (through discourse) while incorporating a nod to Laclau’s “internal frontier” and simultaneously narrows the conception toward Weyland’s operational definition.

Populism as a strategy covers a variety of conceptions concerning populism. Zaslove’s definition, however, seems far more significant and useful. It isn’t enough to be populist for this approach, because the act of being populist is defined, at least partially, by the actions of people in a social movement with “populist features” and ostensibly under the leadership of some patriarchal figure. This approach and its authors view populism differently than both the ideological approach and the discourse approach.

5. Re-Thinking Populism and Its Consequential Scholars

This section aims to extract the most important definitions from each category and compare them against each other. These include Cas Mudde’s “thin-centered” ideology definition, Ernesto Laclau’s discourse theory definition, and Andre Zaslove’s two-part definition that pays attention to both discourse and organizational forms of populism. Mudde’s definition, as arguably are all ideological definitions, is logic of interpretation or an “ideational” argument—that is to say the populists have a fundamental set of ideas that have belief in “the people” as being pure and as always in opposition to the corrupt elites. While both Laclau’s and Zaslove’s seem to be logics of position or “structural” arguments—that is to say the actors are responding to material forces (for example, increased access to health care or rejecting immigrants) and that any antagonistic relationship between “the people” and “the elites” can come and go as demands rise and are satiated.

In light of this, the article asks how a definition might be constructed that captures the ideological foundation of populism and its central tenets but also accounts for those who would use discourse and organizational strategies that reflect populist ideology, but perhaps do not actually believe in that ideology. Populism as an ideology must be rooted in popular sovereignty. As such, it is incompatible with any and all ideologies that reject any notion of “the state” and “the people”. We have chosen the most influential definition from each of the three categories of populism scholarship. This article offers therefore the following definition:

Populism is an ideology that believes “the state” is constituted by popular sovereignty. Populist discourse pits “the people” against “the elites” and “the pluralists” in an “internal antagonistic frontier” whom would strive to reconfigure state sovereignty, traditions, and laws away from the general will of “the people”. As such, populism is an ideology fundamentally incompatible with other ideologies that reject “the state” or “the people”.

Stated as such, this definition retains a theoretical level of abstraction so as to be applicable across time and space, yet narrow enough to avoid including a variety of cases, which simply could not be ideologically grounded populism. However because of its concise conception of how populist discourse works, it provides a clean way to compare those who believe populism ideology versus those who simply use populist discourse. Expressed as such, this definition may provide a way forward for research to be more precise in what is populism and simultaneously avoid having to rely on an overly broad typology.

The next section grounds these definitions in a case study of the recent Greek phenomenon of the Syriza party in Greece. It uses each approach, as discussed above, as a tool to assess if this party is indeed populist or not.

6. Is the Syriza Party a Populist Party?

Because of electoral rules, a minority party often has greater EU level representation than at the national level, but the Syriza party has done well on both fronts. The Syriza party obtained just over 35 percent of the vote in the most recent national election of September 2015 (BBC.com^a). Moreover, it won nearly 27 percent of the vote in the 2014 EU parliament elections (BBC.com^b). In both cases, the Syriza party was the top choice for Greek voters.

Using discourse analysis, Stavrakakis and Katsambekis (2014) conclude that there is some antagonistic relationship between “the people” and some “other”, by examining statements made by the Syriza party and its leader Alexis Tsipras. Their analysis begins by tracing the status of “the people” and they find that in the early years of the Syriza party there was hardly any reference at all to “the people” but instead words like “society” and “youths” were more prevalent. However, by 2012, they found that in at least one speech, Tsipras referred to “the people” over 50 times. More than just counting the use of the phrase “the people” however, the significance of the word becomes more powerful, “...it clearly assumes the role of a privileged reference, a nodal point that over-determines this discourse from beginning to end...” (p. 128). In other words, they argue it clearly fulfills the criterion of the discourse having a central reference to “the people”.

Many authors who claim populism is a strategy for mobilization often focus on organizational or “operational” components of populism. Following the definition by Zaslove (2008), populism is first identified by the discourse pitting “the people” against both “elites” and “others”. Second, a “charismatic leader” claims to have a “direct and unmediated relationship” with “the people”, which leads to a “centralizations of leadership” and a “low level of party institutionalization” (pp. 323-324).

To explore populism as an ideology we can refer back Mudde’s “populism is an ideology” that considers society to be ultimately separated into two homogeneous and antagonistic groups, “the pure people” versus “the corrupt elite” and which argues that politics should be an expression of the *volonté générale* (general will) of the people (Mudde, 2004). By this point, after exploring two approaches, it has been well established that Tsipras and the Syriza party view the Greek people divided, arguably, into the “homogenous and antagonistic groups”. However, it hasn’t been clear that the people are “pure” or that the elite (establishment or status quo) are “corrupt”. Going directly to the source, at the website of the prime minister of Greece, Tsipras says in a speech “The political and economic storm that our country has seen left one thing steadfast in place: the clientelistic and corrupt state that supported the political and economic elite of this country” (Primeminster.gov.gr). Even if we grant that referring to a “corrupt state” satisfies the “corrupt elite”—and I think we should—there is no indication or mention of a “pure people”. However, it is conceivable that by definition, if the state is corrupt and in opposition to the people, the people are therefore pure.

Therefore, it seems that in comparison to the other two approaches, relatively speaking, it is less clear whether or not the Syriza party is indeed populist according to the Mudde’s ideological approach. This is partially due to the fact that a moral component doesn’t seem to enhance or better capture who or who is not populist. Moreover, the inferred discourse from said moralization also seems absent in the case of Syriza. It seems unlikely that Mudde and other scholars who follow this approach would classify the Syriza party as populist.

Let us turn then to the new definition as put forward by this paper. First and foremost, populism is an ideology that believes “the people” are the constituent power of the state—that the state is legitimated by popular sovereignty. As such, the discourse should reflect “the people” in opposition to the “the state” and “the pluralists” who would aim to undermine or reconfigure “the people’s” will. The discourse of the Syriza party clearly articulates populist discourse, through both rhetoric and images. More importantly, however, is that because Greece is a democracy, we can imagine that not only does Tsipras and the Syriza party use populist rhetoric, but that they actually believe populism as an ideology—that the state itself is representative of and constituted by the popular sovereignty. This is further confirmed by the fact that the Syriza party is neither

anti-state nor anti-people as a party. Therefore the Syriza party is quite obviously a party with populism ideology.

We thus argue that definitions currently in use are somewhat burdened with terminology that can cause confusion and inaccuracies in finding and identifying populism and populists, i.e., leaders or morals. Second, even if a definition does accurately capture the concept of populism, these definitions sometimes fail to even acknowledge a fundamental aspect of populism—popular sovereignty. Following this point, current conceptions don't exclude what obviously cannot be populism, such as anti-state or anti-people ideologies—which allows for a clear distinction between populist rhetoric and populism ideology. As such, our new definition maps onto arguments about populism being affiliated primarily with right-wing nationalist parties, but retains a utility to also explain left-wing examples such as the Syriza party, without having to precondition itself as left or right wing populism or as “inclusionary” or “exclusionary” populism. Indeed, such prefixes have nothing to do with the fundamental ideology of populism, and making such distinctions conflates the “thin-centered” ideology of populism with the compatible host ideologies. In other words, the exclusionary component of “exclusionary populism”, as defined by Mudde, isn't that the populism ideology is somehow different between “exclusionary” and “inclusionary” populists, but that instead they have a different ideology about race, gender, religion, or other criteria.

7. Discriminant Analysis

In order to identify what factors influence how Greek voters actually cast their votes, we conduct a canonical linear discriminant analysis (Note 1) to identify the most important variables that distinguish between the parties in Greece. The data is taken from the European Election Study (Schmitt et al., 2015), which was collected via Computer-Assisted Personal Interviews (CAPI) in February and March of 2015, using a multi-stage stratified random sample of residents 18 years of age and over. There were 681 completed interviews of Greek voters.

Only three variables met the F score to be included in the model, suggesting that these three variables were the best discriminators of vote for a particular party.

We can interpret the first function to represent the Left-Right placement, the second to be trust in the EU, and function three to be age.

Table 1. Group means on canonical variables

Party	F1-L-R	F2 EU Trust	F3 Age
New Democracy	1.1229	0.1812	0.0737
Syriza	-0.9646	0.1786	-0.3328
Panhellenic soc.	-0.2160	0.1828	0.3906
Ind. Greeks	0.1158	-0.4865	-0.1179
Golden Dawn	1.4042	-1.0869	-0.3892
Dem Left	-0.9478	-0.4370	-0.0837
Communist	-2.3135	-0.5281	0.4775
Recreate Gr	-0.0663	0.3691	-1.0667
Greens	1.3892	-1.4700	0.3384

Table 1 shows the group means of the various Greek parties for each of the functions. For Left-Right placement, we see that the Syriza party is the second most left party, behind the Communist party, and close to the Democratic Left party. The Golden Dawn party is the most right party, just ahead of the Greens. The largest party (in this survey) was the New Democracy, and it was the third most right party.

Turning to trust in the EU, the Recreate Greece party was the most trusting in the EU. The New Democracy, the Syriza party and the Socialists had about the same moderately positive trust, with the Greens the most untrusting, followed by Golden Dawn.

Turning to the third significant function, age, and the Recreate Greece party had the youngest average age for any party, and the Syriza party and Golden dawn were also below the overall average age. The communists, socialists and Greens were older than the average.

Table 2. Means on all variables by party

Variable	Party									
	Ndem	Syriza	PSM	IG	GD	DL	CP	RG	GR	Total
* L-R	7.908	4.575	5.710	6.643	8.818	4.765	2.550	6.200	8.714	6.162
* EU trust	2.431	2.745	2.720	3.143	3.152	3.059	3.425	2.200	3.143	2.724
* Age	54.32	46.41	52.55	44.21	46.30	49.17	52.00	43.80	60.57	50.78
Terrorism	0.021	0.065	0.022	0.000	0.091	0.000	0.050	0.200	0.143	0.041
Agriculture	0.113	0.065	0.151	0.143	0.091	0.059	0.125	0.000	0.286	0.106
Power of EU	0.185	0.183	0.086	0.071	0.121	0.118	0.150	0.200	0.286	0.158
Immigration	0.221	0.242	0.269	0.214	0.333	0.059	0.150	0.000	0.429	0.232
Crime	0.292	0.275	0.269	0.143	0.333	0.353	0.325	0.000	0.286	0.284
Gender	1.569	1.542	1.559	1.429	1.394	1.294	1.400	1.400	1.143	1.519
Class	1.979	1.882	1.860	1.786	1.606	1.706	1.850	2.400	1.714	1.889
Lost job	1.682	1.503	1.677	1.714	1.485	1.412	1.425	1.400	1.286	1.587
Less Income	1.046	1.033	1.065	1.000	1.000	1.000	1.050	1.000	1.143	1.041
Unemployment	0.672	0.850	0.699	0.857	0.758	0.706	0.875	0.400	0.714	0.749
Econ. Growth	0.703	0.765	0.613	0.571	0.606	0.647	0.550	0.800	0.857	0.686
Euro	0.195	0.111	0.226	0.071	0.152	0.118	0.125	0.000	0.286	0.163
M/L Unification	6.492	6.039	6.312	5.857	5.333	6.353	4.050	7.600	3.143	6.041

Table 2 shows the group means on each question included in the model. This shows that the Syriza party was more leftist, with a score of 4.57, than the average of 6.16 for all Greeks. They were nearly as trusting of the EU as the other parties, although slightly less trusting than the New Democracy voters. Also, they were just over four years younger than the sample average, while New Democracy voters were just over four years older than the average. The other variables did not significantly distinguish between the parties.

8. Conclusions

Despite all the economic woes of Greece, this highly successful Syriza Party has not shown itself to be anti-EU, and clearly has an appeal among younger, newer voters. Unlike our previous studies of European populist parties, such as the DPP in Denmark, and UKIP in the UK, the Syriza party is not distinguished by their right wing ideology, animosity to immigrants, or sharp distrust of the EU (Southwell, 2013; Southwell & Lindgren, 2013, 2015). This party seems to be closer to that of the left-leaning Pirate Party of Iceland (Southwell, 2015), although Syriza supporters seem more focused on issues related to the European Union. As such, the ideological leanings of neo-populist parties in Europe appears to vary considerably. Upcoming elections in Iceland and France may reveal whether these parties will have further electoral success by leaning toward one side of the political spectrum or not.

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Note

Note 1. Canonical Discriminant Analysis is used to investigate the difference between groups on the basis of the attributes of the cases, indicating which attributes contribute most to group separation (Burns & Burns, 2008). The analysis was conducted using weighted prior probabilities for each party's proportion of the population. Linear discriminant analysis involves the determination of a linear equation like regression that will predict to which group a case belongs. The form of the equation is: $D = v_1X_1 + v_2X_2 + v_3X_3 + \dots + v_iX_i + a$ Where D=Discriminant function, v=discriminant coefficient or weight, X=respondent's score for that variable, a=a constant, i=number of predictor variables.

Appendix A. Variables used in analysis

QPP5 Political party voted for in last parliamentary elections

Qpp13 Left-Right placement

Qp5t_1 Unemployment (as most important issue)

Qp5t_2 Crime (as most important issue)

Qp5t_3 Terrorism (as most important issue)

Qp5t_4 Economic Growth (as most important issue)

Qp5t_5 Euro stability (as most important issue)

Qp5t_6 Pensions (as most important issue)

Qp5t_7 Immigration (as most important issue)

Qp5t_8 Agriculture (as most important issue)

Qp5t_9 Power of EU (as most important issue)

D10 Gender

Vd11 Age

D61r Class (three levels)

Qpp11_1 Lost Job in last 12 months

Qpp11_2 Less income in last 12 months

Qp6_2 Trust in EU as Institution

Qpp18 European Unification More or Less

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Health and Households' Portfolio Choices in Europe

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Abstract

Using the Survey of Health, Ageing, and Retirement in Europe (SHARE), this study investigated how health is associated with households' portfolio choices in 10 European countries. This study reports three important findings on the relationship between health and portfolio choices. First, households in poor health condition are less likely than households in good health to own various types of financial and non-financial assets. Second, households in poor health condition tend to allocate a lower share of their wealth to risky financial assets, savings for long-term investment, their principal residence, and other non-financial assets while they allocate a larger share to liquid assets such as bank deposits. Third, there exists a regional variation in the magnitude of the correlation between health and portfolio choices. This regional variation can be explained by differences in health care systems. Overall, these findings suggest that negative health shocks are significantly associated with a household's portfolio choices.

Keywords: health, portfolio choices, background risk, SHARE

1. Introduction

An aging population creates various social and economic challenges, such as a prevalence of physical health problems among the elderly and an increase in medical expenditures. According to a recent report (Mackenbach et al., 2005), around 40 percent of the population aged 50 or above in Europe experienced limitations in daily activities, almost 50 percent of them reported having some long-term health problems, and more than 60 percent were diagnosed with at least one chronic medical condition (Note 1).

The incidence of negative health shocks could influence a household's portfolio choices by increasing its background risk (Note 2). First, elderly individuals with health problems are more likely to lose their ability to work (Kalwij & Vermeulen, 2005), which can significantly lower household income levels. Second, health problems often incur medical expenditures (Goldman & Maestas, 2013), and the probability of an unexpected increase in medical expenditures is higher among elderly households. Households often respond to medical expenditure risk in two ways: saving more for precautionary reasons (Kotlikoff, 1986; Palumbo, 1999; Atella et al., 2012) and changing the composition of their financial portfolios to reduce their overall exposure to financial risk (Gollier & Pratt, 1996; Goldman & Maestas, 2013; Cho, 2014). This paper aims to examine how health of elderly household is associated with their household portfolio choices.

Considerable attention has been given to the relationship between health and household portfolio choices. In his theoretical model, Edward (2008) defined health as a non-tradable risky asset and explained that an adverse health shock makes an individual more risk averse. According to his model, health influences an individual's attitude toward risky financial assets, and a negative health event leads the individual to lower his/her share invested in a risky portfolio. Feinstein (2006) explicitly included health status in a model for savings and financial portfolio allocation by the elderly. He showed that agents in poor health, who are consequently exposed to greater medical expenditure risk, place a slightly lower proportion of their wealth in risky financial assets than do individuals in good health. The following studies provided empirical evidence to support those theoretical predictions. Rosen and Wu (2004) studied the effect of health on portfolio allocation using the Health and Retirement Study (HRS) and found a negative relationship between poor health and risky asset holdings. They found that households in poor health tend to allocate a lower share of their financial wealth in risky assets and a larger share in safe assets. Using the same data, Berkowitz and Qui (2006) investigated the effect of health on U.S. household portfolios and showed that the effect of health shocks on financial and non-financial wealth is

asymmetric: a diagnosis of a new disease tends to have a larger effect on financial wealth than on non-financial wealth. Colie and Milligan (2009) also used the HRS and found that health shocks play an important role in explaining changes in household portfolios over time. In particular, they investigated households' ownership decisions on various types of assets and their decisions on the share invested in each asset category. They found that households in poor health condition have a lower probability of owning a principal residence, vehicles, financial assets, businesses, and other real estate and those households in poor health allocate a larger share of wealth to liquid assets and time deposits. They also showed that the effect of health shocks strengthens with the passage of time after a shock. However, the literature provides little empirical evidence from outside the U.S.

This study aims to fill this gap in the literature by providing new empirical evidence on the relationship between health and household portfolio choice outside the U.S. Similar to Atella et al. (2012), which is the first empirical research on the effect of health shocks on household portfolio choices outside the U.S., this study uses the Survey of Health, Ageing, and Retirement in Europe (SHARE) data set to examine the relationship between health and household portfolio choices in European countries. The empirical analyses of this study consist of two parts. First, it studies the relationship between health and a household's portfolio decision to own (or not) each type of asset (extensive margin). Second, it explores the relationship between health and a household's allocation decision for each asset category (intensive margin). This study differs from Atella et al. (2012) on two distinct grounds. First, it investigates household portfolio decisions on both financial and non-financial assets. This approach allows exploring the possibility that households' responses toward negative health shocks are asymmetric in their choices about financial and non-financial assets, as Berkowitz and Qui (2006) reported in their study on U.S. households. Second, this study adopts panel data analysis models to control for unobserved household-specific fixed effects. These new approaches allow providing more comprehensive pictures of the relationship between health and household portfolio choices in multiple European countries.

The empirical evidence of this study suggests that health status is importantly associated with household portfolio decisions in ten European countries. The empirical results indicate that households in poor health condition have a lower probability of holding risky financial assets (i.e., bonds, stocks, and mutual funds), savings for long-term investment (i.e., individual retirement accounts, contractual savings, and whole life insurance), a principal residence, and other non-financial assets (i.e., businesses and other real estate). The results also show that households in poor health condition allocate a larger share of their wealth in liquid assets (i.e., bank deposits) with a correspondingly smaller share in risky financial assets, savings for long-term investment, primary residence, and other non-financial assets. The overall findings suggest that health risk is closely associated with households' portfolio choices. In terms of the relationship between health and a household's portfolio choices, the findings of this study are mostly consistent with the empirical evidence reported in prior studies using the U.S. data sets. In addition, the empirical evidence of this study indicates that a negative relationship between poor health condition and household portfolio choices can be observed in all European countries in the sample. This contradicts the findings of Atella et al. (2012), who found that health status has a meaningful relationship with household portfolio choices only in countries with less protective health care systems. The empirical results of this study suggest that health is closely related to household portfolio choices in all European countries in a similar manner regardless of health care system.

The remainder of the paper is organized as follows. Section 2 describes the data set used in this study and provides a descriptive analysis of the health and wealth data in ten European countries. Section 3 discusses the empirical strategy of this study, and Section 4 reports the empirical results on the relationship between health and household portfolio choices. Section 5 concludes with a summary and suggestions for future research.

2. Data

2.1 The Survey of Health, Ageing, and Retirement in Europe (SHARE)

To empirically examine the relationship between health status and households' portfolio choices, this study uses three waves of SHARE data. Of the four survey waves conducted so far, the third wave of SHARE data is restricted for public use because the survey took place in 2009, in the middle of the global financial crisis. SHARE is a cross-national panel survey on a representative sample of individuals aged 50 or above in Europe. The baseline study was conducted in 2004 in 11 European countries: two Northern European countries (Denmark and Sweden), six Central European countries (Austria, Belgium, France, Germany, the Netherlands, and Switzerland), and three Southern European countries (Greece, Italy, and Spain). All of those countries except for Greece participated in the follow-up surveys in 2006 and 2011.

One major advantage of using SHARE is that the data were collected in a completely standardized way across all countries. Therefore, the data collected in multiple countries are compatible, making this data set a good source

for a cross-country analysis. Another advantage is that it provides comprehensive information on the demographics and health status of household members as well as detailed information on household wealth and income. As such, this data set allows researchers to examine how health status is associated with households' portfolio choices.

To facilitate a comparison with the relevant literature on portfolio allocation (Guiso et al., 2002; Rosen & Wu, 2004; Brunetti & Torricelli, 2010), this study categorized seven different types of financial assets into three groups (Note 3): liquid assets (i.e., deposits in bank accounts), risky financial assets (i.e., bonds, stocks, and mutual funds), and savings for long-term investment (i.e., contractual savings, individual retirement accounts, and whole life insurance). Following Colie and Milligan (2009), this study examined not only financial assets but also non-financial assets. This paper focuses on two main non-financial assets: principal residence and other non-financial assets (i.e., business and other real estate).

It must be noted that several exclusion criteria were applied in this study. First, to facilitate the household fixed-effect model, the sample data set includes households that participated in all three waves of surveys, conducted in 2004, 2006, and 2011. Second, to observe a more meaningful relationship between health and households' portfolio choices, this study excluded households with (1) net financial assets less than 500 euros, (2) non-positive total net wealth, and (3) non-positive income. The 2004 SHARE originally surveyed 23,709 households in 10 European countries. The number of households that participated in all three waves was 11,854. After applying the exclusion criteria, the final sample included in the analysis contained 9,119 households. The rest of this section provides a descriptive analysis of households' health and wealth data.

2.2 Demographic Variables

The top panel of Table 1 presents a summary of the sample's demographic characteristics. The average age of the household head is 64-66 years in all countries during the first survey period of 2004. The percentage of married couples is relatively similar across countries, ranging from 56.5 percent in Austria to 69.9 percent in Italy. The average family size is around two in all the sample countries. Educational attainment levels are similar, although there is some cross-country variation. For example, more than 50 percent of elderly households did not complete secondary education in Italy and the Netherlands. Also in Austria, Belgium, Denmark, and Germany, more than 25 percent of elderly households completed a college education.

Table 1. Summary statistics

Country	Austria	Belgium	Denmark	France	Germany	Italy	Netherl ands	Spain	Sweden	Switzerl and
Age	66.8	66.3	64.5	65.8	65.8	66.0	64.9	65.7	66.0	65.3
% of married	56.5	66.4	59.7	62.7	63.9	69.9	67.9	64.4	61.2	65.1
Female head	50.5	46.8	56.5	46.1	56.4	55.0	56.0	59.2	56.9	45.3
Size of family	1.9	2.0	1.8	2.0	2.0	2.4	2.0	2.5	1.9	2.0
Educational attainment										
Less than high school	24.0	44.7	20.6	45.2	14.9	65.9	50.9	0.8	47.0	32.6
High school	50.9	27.2	41.0	32.1	56.7	26.3	24.5	9.2	29.8	57.7
College	25.1	28.1	38.3	22.6	28.3	7.8	24.5	12.2	23.2	9.6
Health status										
Poor health	28.4	27.6	23.2	35.1	37.4	40.7	28.3	42.6	27.0	15.7
Have a medical condition	72.0	75.0	74.4	76.2	74.1	76.7	66.9	80.1	72.1	63.1
Have an acute condition	13.9	17.9	20.3	18.7	18.3	12.8	15.0	11.8	21.1	11.0
Have a chronic illness	42.5	40.3	45.8	49.0	57.3	40.9	44.4	53.9	52.4	37.6
Limited activities	50.5	38.0	34.0	34.8	49.1	40.0	48.9	39.0	38.7	29.7

Note. All the statistics are weighted. Summary statistics are from the first wave of the SHARE data.

2.3 Health Status Indicators

SHARE provides detailed information on the health status of each household member. Using that information, three different measures for subjective and objective health conditions were constructed. The first measure (*POOR*) is a dummy variable indicating that a respondent's self-reported overall health status is poor. In SHARE, each household member evaluates his/her own health condition and answers by choosing one of five choices: excellent, very good, good, fair, or poor. This dummy variable for self-reported health condition takes the value of one if a respondent answers that his/her health condition is either poor or fair and zero otherwise. The second measure (*ACUTE*) is a dummy variable that takes the value of one if a doctor has diagnosed an acute medical condition such as heart attack, stroke, cancer, or bone fracture and zero otherwise. The third measure (*CHRONIC*) is a dummy variable indicating whether a respondent suffers from a chronic illness such as high blood pressure, high blood cholesterol, diabetes, chronic lung disease, asthma, arthritis, osteoporosis, stomach or duodenal ulcer, Parkinson's disease, cataracts, coronary disease, joint pain, stomach burns, or chronic bronchitis. These three health status indicators provide slightly different information on each individual's health condition. While two of the variables provide somewhat objective information about a respondent's health condition, the self-reported health status (*POOR*) provides better information about a respondent's overall health condition. Therefore, this self-reported health status variable is used as the main health variable in this study.

The bottom panel of Table 1 presents a summary of statistics on the health status indicators in the 10 sample countries. The proportion of household heads who reported poor health condition ranges from 15.7 percent in Switzerland to 42.6 percent in Spain. Having a medical condition does not necessarily lead a household head to perceive his/her health condition to be poor. Almost three quarters of elderly households answered that they have been diagnosed with a medical condition. The proportion of households with one or more medical conditions ranges from 63.1 percent in Switzerland to 80.1 percent in Spain. Elderly households are more likely to have a chronic illness than an acute medical condition. The proportion of households with acute conditions varies across countries, ranging from 11.0 percent in Switzerland to 21.1 percent in Sweden. On the other hand, the proportion of households with chronic illnesses ranges from 37.6 percent in Switzerland to 57.3 percent in Germany. The proportion of households with limited daily activities due to health conditions varies more widely than the other indicators: this proportion is highest in Austria, Germany, and the Netherlands (50.5 percent, 49.1 percent, and 48.9 percent, respectively) and lowest in Switzerland at 29.7 percent.

2.4 Household Income and Wealth

SHARE provides extensive information about the income and wealth of each household. A household's financial wealth is allocated into three major groups of financial instruments: bank accounts, risky financial assets (e.g., bonds, stocks, and mutual funds), and savings for long-term investment (e.g., contractual savings for housing, individual retirement accounts, and whole life insurance). SHARE also surveyed the value of a set of non-financial asset categories, including the principal residence, own business wealth, other real estate, and vehicles.

Table 2. Household portfolio choices in Europe

Country	Austria	Belgium	Denmark	France	Germany	Italy	Netherl ands	Spain	Sweden	Switzerl and
% with positive asset holdings										
Bank accounts	99.8	100.0	99.7	99.4	98.8	100.0	98.0	99.6	99.6	99.6
Savings for long-term investment	56.6	32.5	39.2	62.8	41.9	4.1	91.3	13.8	54.5	28.9
Bond, stocks, and mutual funds	15.9	36.1	55.5	25.7	32.4	29.0	22.4	9.0	71.1	50.3
Principal residence	56.0	79.2	74.9	77.6	60.8	85.5	64.0	93.6	75.3	55.6
Car	67.3	76.5	75.9	75.7	72.5	72.8	75.1	54.2	76.1	70.0
Other real estate	12.0	18.9	21.2	23.2	14.8	25.4	6.2	26.9	32.0	21.4
Own business	2.7	3.7	9.0	2.3	4.7	1.1	4.6	6.1	13.0	8.6
Median value of assets (in 2006 Euro), conditional on positive asset holding										
Financial assets										
Bank account	4,893	8,924	8,070	4,500	7,100	7,555	9,479	3,000	8,000	26,482

Savings for long-term investment	7,200	23,519	38,927	16,066	25,000	15,000	30,000	15,000	23,485	53,682
Bond, stocks, and mutual funds	14,000	35,157	22,879	12,219	17,441	24,495	20,727	12,000	18,079	55,947
Non-financial assets										
Principal residence	150,000	173,525	161,500	182,938	200,000	150,000	270,000	120,000	98,616	427,831
Car	6,000	5,000	6,729	5,000	6,000	4,167	7,500	3,027	6,779	6,582
Other real estate	100,000	103,976	107,667	100,000	120,000	80,000	150,000	100,000	54,786	185,087
Own business	104,000	150,000	67,291	65,804	50,000	55,966	70,000	45,275	48,301	82,275
Mean share in total asset, conditional on positive asset holding										
Financial assets										
Bank account	22.2	23.1	22.3	15.7	30.3	13.4	30.7	8.7	19.9	34.6
Savings for long-term investment	20.9	11.9	27.2	18.9	20.4	11.1	7.1	13.6	18.2	25.4
Bond, stocks, and mutual funds	21.6	28.2	16.6	8.2	18.2	17.6	16.7	12.0	18.4	25.7
Non-financial assets										
Principal residence	80.6	69.7	52.0	73.1	69.5	80.3	70.2	79.3	56.6	58.6
Car	19.9	5.4	7.0	6.6	11.4	6.2	13.0	4.9	6.1	8.1
Other real estate	38.6	37.7	36.0	39.3	35.0	34.2	39.2	43.2	33.1	34.6
Own business	21.4	25.7	25.6	25.5	13.5	15.2	29.1	23.1	16.6	22.2
No. of households	715	1623	684	1065	874	813	1102	658	1143	442

Note. All statistics are weighted. The values of various assets are in 2006 Euros. Mean share in total assets are the share of household net wealth invested in each asset category.

Table 2 provides a descriptive analysis of the household asset holdings and asset allocation in the sample countries. The top panel reports the proportion of households that own each category of assets. The middle and bottom panels show the median values of asset holding and the share of household net wealth allocated in each asset category, conditioning on ownership. These descriptive statistics reveal some well-known patterns of household portfolio choices in Europe. Almost all the sample households own bank accounts. On average, around 20 percent of household wealth is allocated in bank account deposits, and the median value of deposits is 8,909 euros. However, there is a clear variation in the share of wealth allocated in bank account deposits across countries. For example, households in Germany, the Netherlands, and Switzerland tend to allocate more than 30 percent of their net wealth to deposits in a bank account, whereas Spanish households allocate only 8.7 percent of their wealth in deposits in a bank account.

The proportion of households who own savings instruments for long-term investment is 42.6 percent, on average. Conditioning on the ownership of savings for long-term investment, elderly households allocate 15.9 percent of their wealth in savings for long-term investment, and the median value of assets in this category is 23,444 euros. However, household portfolio choice patterns regarding savings for long-term investment vary significantly across countries. For example, in the Netherlands, where most of the adult population has individual retirement accounts, the proportion of elderly households owning savings for long-term investment reaches 91.3 percent. On the other hand, only 4.1 percent of Italian households own savings for long-term investment. In terms of the share of wealth invested in savings for long-term investment, Dutch households allocate only 7.1 percent of their wealth in this asset category. On the other hand, households in Denmark and Switzerland invest more than 25 percent of their wealth in savings for long-term investment.

Across the 10 sampled European countries, 34.7 percent of European elderly households own risky financial assets such as bonds, stocks, and mutual funds. The households that own risky financial assets allocate 16.7 percent of their wealth in them, on average, and the median value of the risky financial assets held is 22,510 euros. Portfolio choice patterns regarding risky financial assets also vary across countries. Whereas only 9 percent of Italian elderly households own risky financial assets, more than half of elderly households own risky financial assets in Denmark and Switzerland. In Belgium and Switzerland, more than one quarter of household wealth is invested in risky financial assets. On the other hand, French households allocate only 8.2 percent of household wealth in risky financial assets.

Table 2 also shows the ownership status and asset allocation for non-financial assets. The homeownership rate in the sample countries is relatively high. Considering that this study examined the portfolio choices of elderly households, the fact that more than half of the sample households own their primary residences is not very surprising. However, homeownership is generally higher in the southern part of Europe (85.5 percent in Italy and 93.6 percent in Spain) than in the north (56.0 percent in Austria and 55.6 percent in Switzerland). Homeowners allocate 62.7 percent of their wealth to their home, on average. However, the share of wealth invested in one's home varies quite significantly. In Denmark and Sweden, households allocate 52.0 percent and 56.6 percent of their wealth in their principal residences, respectively. On the other hand, more than 80 percent of household wealth is locked in homes in Austria and Italy.

The ownership rate of other real estate is 20.2 percent, on average, which is lower than that for homes. Those households that own other real estate allocate 37.1 percent of their wealth to this asset category. The median value of other real estate is 110,152 euros. The ownership of automobiles is generally high in all sample countries, ranging from 54.2 percent in Spain to 76.5 percent in Belgium. Cars account for 8.9 percent of household wealth, on average. The proportion of elderly households that own their own business is generally low, 6.8 percent on average. The fact that most of the sample households are near or beyond their retirement age could be one explanation for the low rate of owning one's own business. The households that own their own business allocate an average of 19.8 percent of their wealth to that business.

3. Model

This paper explores the relationship between health and portfolio choices in two ways. The first regression analysis examines whether health condition is associated with households' ownership decision for each asset category. The basic regression model takes the following form:

$$assetholdings_{itc} = \beta_0 + \beta_1 Health_{itc} + \beta_2 X_{itc} + \beta_3 D_t + \mu_{ic} + \varepsilon_{itc} \quad (1)$$

where $assetholdings_{itc}$ is a binary variable indicating ownership of an asset by household i in country c in year t ; $Health_{itc}$ is a measure for the health status; X_{itc} is a set of control variables that influence a household's portfolio choices; D_t is a set of year dummies; μ_{ic} is a time-invariant household-specific fixed effect; and ε_{itc} is an idiosyncratic error.

If the estimate for β_1 is significantly different from zero, health status ($Health_{itc}$) is significantly associated with that household's portfolio choices to hold (or not) a certain type of asset. Equation (1) can be empirically estimated using a fixed effect logit model. This analysis uses four different dependent variables that indicate ownership of the four asset categories: risky financial assets, savings for long-term investment, principal residence, and other non-financial assets. The key independent variable (Note 4) is a measure for the health status of the household head and spouse.

The second part of the analysis explores how health condition is associated with a household's asset allocation decisions. The regression model uses the share of wealth invested in each type of asset category as the dependent variable as follows:

$$assetshare_{itc} = \beta_0 + \beta_1 Health_{itc} + \beta_2 X_{itc} + \beta_3 D_t + \mu_{ic} + \varepsilon_{itc} \quad (2)$$

where $assetshare_{itc}$ is a continuous variable for the share of net wealth invested in each type of asset category. This analysis uses five separate dependent variables that measure the share of net wealth invested in five asset categories: liquid assets (i.e., deposits in bank accounts), risky financial assets, savings for long-term investment, principal residence, and other non-financial assets. One of the main statistical issues in this analysis is that many households do not hold any of a certain type of asset, so the asset share variable is zero for many households. Because of the non-participation for certain types of asset categories, this study used a panel Tobit regression model (Note 5) to address the sample selection problem.

All the specifications of this study include an extensive set of household characteristics as the determinants of households' portfolio choices. For the choice of control variables, this study relied on the widely accepted results reported in the literature on household finance: the age of household heads, age-squared, a dummy variable for high school graduates and college graduates, family size, and household income and wealth.

4. Results

4.1 Health Condition and the Probability of Asset Ownership

This section explores whether health is associated with a household's decision to own a certain type of asset (extensive margin). Table 3 (Note 6) reports the fixed effect logit analysis results documenting the relationship between health and a household's decision to own each of the four asset categories: risky financial assets,

savings for long-term investment, principal residence, and other non-financial assets. A negative estimate of the health condition variable indicates that a household with poor health condition has a lower probability of holding the asset type of interest. All the estimates reported in Table 3 are marginal effects.

Table 3. Health status and households' decision to hold an asset: panel logit analysis

Asset category		Health status		
		Poor (1)	Acute (2)	Chronic (3)
Risky financial asset	Health status : HH head	-0.686 ** (0.338)	-0.391 * (0.220)	-0.369 ** (0.154)
	Health status : Spouse	0.016 (0.095)	0.610 (0.149)	-0.063 (0.100)
Savings for long-term investment	Health status : HH head	-0.627 *** (0.167)	-0.941 *** (0.191)	-0.190 (0.151)
	Health status : Spouse	-0.079 (0.062)	-0.510 *** (0.131)	-0.382 *** (0.092)
Principal residence	Health status : HH head	-0.337 (0.556)	1.182 (1.504)	-1.143 * (0.600)
	Health status : Spouse	-0.271 * (0.147)	-3.078 *** (0.636)	0.064 (0.545)
Non-financial asset	Health status : HH head	-3.001 ** (1.369)	-0.026 (0.450)	-0.743 (0.214)
	Health status : Spouse	-0.087 (0.085)	-0.549 *** (0.093)	0.095 (0.139)

Note 1. Dependent variables are a dummy variable indicating ownership of risky financial asset in the top panel, a dummy for ownership of savings for long-term investment in the second panel, a dummy for ownership of principal residence in the third panel and a dummy variable for ownership of non-financial asset in the bottom panel. Columns 1-3 use three different health measures, POOR, ACUTE, and CHRONIC, respectively. This table reports a total of 12 pairs of estimates on health condition of household head/spouse from 12 separate specifications. Robust standard errors are in parenthesis. All the estimates reported in the table are marginal effect. The estimates for control variables are reported in Appendix Table 2.

Note 2. "****" indicates that the estimate is statistically significant at the 1 percent significance level, "***" at the 5 percent significance level, and "**" at the 10 percent significance level.

The top panel of Table 3 shows the correlation between health and the probability of owning risky financial assets, such as bonds, stocks, and mutual funds. In columns 1-3, all three estimates for the health status of the household head are negative and statistically significant. This suggests that European elderly households facing increased background risk from negative health shocks have a lowered probability of owning risky financial assets. This result is consistent with the findings of previous studies using U.S. data sets (Rosen & Wu, 2004; Colie & Milligan, 2009). The second panel from the top shows the panel logit analysis results on the probability of owning savings for long-term investment. In all three columns, the coefficients for the health condition of the household head/spouse are negative and statistically significant. This indicates that a household whose head/spouse is in poor health is less likely than households with a healthy head/spouse to invest in savings for long-term investment. The third and the fourth panels show the relationship between health and the probability of owning non-financial assets. In the third panel, the coefficients for the health status of the household head/spouse are negative and statistically significant, which indicates that a household in poor health has a lower probability of owning a house. This result suggests a negative correlation between poor health and homeownership in European countries and is consistent with the findings of Colie and Milligan (2009), who used a U.S. data set. Similarly, in the bottom panel, the coefficients for the health status of household

head/spouse are negative and statistically significant, indicating that the probability of owning other non-financial assets is lower among households in poor health than among households in good health. Overall, the results in Table 3 suggest that a household head/spouse's poor health condition is negatively associated with a household's portfolio decision to own financial and non-financial assets. Similar to the findings in the previous literature (Rosen & Wu, 2004; Colie & Milligan, 2009), these results provide new empirical evidence supporting the theoretical prediction of a negative correlation between health and household portfolio choices in European countries.

Using the 2004 SHARE data, Atella et al. (2012) examined household portfolio choices in European countries and showed that health status influences a household's portfolio choices only in countries with less protective health care systems. They did not observe a negative relationship between health and portfolio choices in countries with a protective, full coverage national health system such as Denmark, Italy, Spain, and Sweden. They argued that the presence of a protective national health system could mediate the effect of health risk on a household's portfolio decision by reducing the probability of incurring out-of-pocket medical expenditures. Similar to Atella et al. (2012), this study also examines whether the relationship between health and household portfolio decisions on asset ownership vary depending on a country's health care system. The model specification of this includes an interaction term (Note 7) between the health status variable and a dummy variable for countries with a national health system (NHS). The reference group is countries where medical expenditures are primarily covered by private health insurance, such as the Netherlands and Switzerland, and countries where public health systems coexist with several forms of private health insurance, such as Austria, Belgium, France, and Germany.

Table 4 reports the fixed effect logit estimates from the specification with an interaction term between the health variable and an NHS dummy. All the reported estimates are marginal effects. If the coefficient for this interaction term were statistically significantly different from zero, it would indicate that the magnitude of correlation between health and the probability of owning a certain type of asset differs across countries depending on the health care system. The first three columns report the estimation results on risky financial assets. In columns 1-3, the coefficients for the health status of the household head/spouse are negative and statistically significant, which suggests a negative relationship between health and the probability of owning risky financial assets. In addition, the coefficient for the interaction term with the NHS dummy is positive and statistically significant, which indicates that the magnitude of the negative correlation between health and the probability of owning risky financial assets is smaller in countries with NHS. In other words, this result shows that a household in poor health condition is less likely to own risky financial assets in all European countries regardless of health care system; however, the magnitude of the negative correlation is significantly smaller in countries with NHS. Columns 4-6 show the fixed effect logit analysis on the probability of owning savings for long-term investment. The coefficients for the health status of the household head/spouse are negative and statistically significant, which indicates that a household in poor health is less likely to own savings for long-term investment. In addition, the coefficient for the interaction with the NHS dummy is positive and statistically significant. This result implies that the magnitude of the negative correlation between health and the probability of owning savings for long-term investment is smaller in countries with a more protective NHS. The results in columns 1-6 show that the magnitude of the negative relationship between health and the probability of owning financial assets is significantly greater in countries with less protective health insurance systems. This result implies that, as Atella et al. (2012) explained, a more protective NHS can provide some mediation to a household with poor health condition against medical expenditure risk and reduce the magnitude of the negative correlation between health shocks and a household's portfolio choices.

Columns 7-9 and columns 10-12 show the fixed effect logit analyses on the probability of owning a home and other non-financial assets, respectively. In columns 7-9, the coefficients for the health status of the household head/spouse are negative and statistically significant. This indicates that the probability of a owning home is significantly lower for a household with poor health. Moreover, in column 9, the coefficient for the interaction with the NHS dummy is negative and statistically significant. This suggests that, among households with chronic medical conditions, the magnitude of the negative correlation between health and the probability of owning home is significantly greater (or smaller) in countries with NHS (or in non-NHS countries). Columns 10-12 also show an asymmetric relationship between health and the probability of owning other non-financial assets, such as a business or other real estate. The coefficients for the health status of the household head/spouse are negative and statistically significant.

Table 4. Households' decision to own asset and health care system: panel logit analysis

	Asset category											
	Risky financial asset			Savings for long-term investment			Principal residence			Non-financial asset		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic
Health status : HH head	-0.22**	-0.46**	-0.04	-0.64***	-0.99***	-0.19***	-0.93***	-1.05*	-0.94*	-0.21	0.28	-0.38*
	(0.140)	(0.233)	(0.137)	(0.164)	(0.186)	(0.144)	(0.324)	(0.575)	(0.531)	(0.350)	(0.186)	(0.194)
Health status : Spouse	0.14	0.16	-0.58***	-0.07	-0.32***	0.02	-0.27*	-0.26	0.05	-0.22**	-0.56***	-0.08
	(0.123)	(0.209)	(0.163)	(0.062)	(0.090)	(0.060)	(0.144)	(0.286)	(0.507)	(0.101)	(0.092)	(0.202)
Age	2.54***	3.51***	3.32***	-0.79***	-1.16***	-1.25***	1.21***	6.53**	4.16**	-1.75**	0.31***	-4.45***
	(0.694)	(0.801)	(0.790)	(0.194)	(0.249)	(0.249)	(0.132)	(3.134)	(1.822)	(0.887)	(0.068)	(1.219)
Age squared	-0.00***	-0.002***	-0.002***	0.003***	0.003***	0.004***	-0.009***	-0.01***	-0.01***	0.00	-0.002***	-0.001*
	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.002)	(0.002)	(0.001)	(0.000)	(0.001)
High school graduate	-0.31***	-0.25**	-0.30***	0.45***	0.47***	0.42***	-0.54***	-1.14***	-1.35***	-0.72***	-0.37***	-0.47***
	(0.116)	(0.111)	(0.110)	(0.082)	(0.086)	(0.086)	(0.182)	(0.334)	(0.327)	(0.160)	(0.092)	(0.124)
College graduate	0.14	0.43***	0.34**	0.28**	0.21*	0.22*	-0.78***	-1.35***	-1.19***	-0.21	-0.30**	-0.43**
	(0.160)	(0.152)	(0.151)	(0.112)	(0.119)	(0.119)	(0.226)	(0.417)	(0.394)	(0.234)	(0.123)	(0.180)
Family size	0.30***	0.14*	0.17	0.16	0.12	0.11	0.07	0.47	0.13	0.03	-0.02	-0.07
	(0.075)	(0.075)	(0.074)	(0.062)	(0.069)	(0.069)	(0.173)	(0.320)	(0.294)	(0.084)	(0.063)	(0.087)
2 nd income quartile	-0.01***	-0.10*	-0.24*	-0.04	0.01	-0.02	-0.56**	-1.07***	-0.44	0.41**	0.56***	0.43***
	(0.119)	(0.124)	(0.122)	(0.090)	(0.101)	(0.100)	(0.219)	(0.357)	(0.330)	(0.163)	(0.115)	(0.147)
3 rd income quartile	0.275**	0.247**	0.134	0.178**	0.315***	0.272***	-0.622***	-1.355***	-0.597*	0.397**	0.251**	0.138
	(0.111)	(0.116)	(0.114)	(0.085)	(0.096)	(0.096)	(0.210)	(0.339)	(0.336)	(0.154)	(0.113)	(0.142)
4 th income quartile	0.389***	0.412***	0.265**	-0.014	0.050	0.019	-0.809***	-1.094***	-0.663**	0.650***	0.202*	0.228
	(0.113)	(0.119)	(0.117)	(0.085)	(0.096)	(0.096)	(0.210)	(0.341)	(0.328)	(0.154)	(0.111)	(0.139)
5 th income quartile (highest)	0.613***	0.674***	0.525***	0.002	0.095	0.074	-0.815***	-1.488***	-0.944**	0.635***	0.313***	0.266*
	(0.119)	(0.126)	(0.124)	(0.090)	(0.102)	(0.102)	(0.230)	(0.396)	(0.384)	(0.160)	(0.118)	(0.151)
2 nd wealth quartile	1.036***	1.272***	1.213***	1.107***	1.029***	1.063***	2.816***	2.921***	2.705***	2.716***	2.024***	2.387***
	(0.142)	(0.153)	(0.149)	(0.104)	(0.120)	(0.119)	(0.195)	(0.294)	(0.266)	(0.333)	(0.181)	(0.280)
3 rd wealth quartile	1.290***	1.560***	1.467***	1.713***	1.754***	1.791***	5.383***	4.540***	4.451***	3.501***	3.218***	3.502***
	(0.148)	(0.159)	(0.156)	(0.115)	(0.131)	(0.131)	(0.227)	(0.326)	(0.296)	(0.338)	(0.187)	(0.287)
4 th wealth quartile	1.794***	2.068***	1.982***	2.263***	2.236***	2.286***	6.237***	5.318***	5.222***	4.707***	4.385***	4.527***
	(0.153)	(0.165)	(0.161)	(0.120)	(0.138)	(0.137)	(0.245)	(0.348)	(0.313)	(0.342)	(0.190)	(0.292)

5 th wealth quartile (highest)	2.391*** (0.160)	2.600*** (0.173)	2.528*** (0.169)	2.795*** (0.127)	2.749*** (0.147)	2.800*** (0.146)	7.942*** (0.284)	7.090*** (0.412)	7.588*** (0.402)	6.076*** (0.351)	5.739*** (0.198)	6.009*** (0.302)
Year 2006	-4.812*** (1.392)	-6.675*** (1.604)	-6.311*** (1.582)	0.629* (0.372)	1.405*** (0.483)	1.459*** (0.485)	0.462*** (0.129)	-8.323 (6.230)	-4.253 (3.580)	3.008* (1.767)	-0.821*** (0.067)	8.451*** (2.429)
Year 2011	-16.336*** (4.867)	-23.247*** (5.611)	-21.894*** (5.534)	2.782** (1.297)	5.431*** (1.688)	5.495*** (1.691)	0.810*** (0.246)	-28.236 (21.792)	-14.794 (12.531)	12.492** (6.193)	-0.762*** (0.130)	32.055*** (8.505)
Health status*Dummy for NHS	0.094*** (0.020)	0.161*** (0.027)	0.171 (0.176)	0.321* (0.169)	0.577*** (0.203)	0.057*** (0.015)	0.279 (0.424)	0.382 (0.676)	-0.396*** (0.064)	-0.169*** (0.032)	-0.128*** (0.024)	-0.001 (0.234)
No. of obs	11742	10584	10618	16834	13216	13228	5322	2046	2270	6698	11468	7127
LR chi-squared	667.51	748.67	671.39	836.43	702.74	686.42	2763.09	1036.54	1157.24	1289.86	2413.06	1375.95
Probability > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note 1. Dependent variables are a dummy variable indicating ownership of risky financial asset in columns 1-3, a dummy for ownership of savings for long term investment in columns 4-6, a dummy for ownership of principal residence in columns 7-9, and a dummy variable for ownership of non-financial asset in columns 10-12. Robust standard errors are in parenthesis. All the estimates reported in the table are marginal effect.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

Table 5. Households’ decision to own asset: regional differences

	Asset category											
	Risky financial asset			Savings for long-term investment			Principal residence			Non-financial asset		
	(1) Poor	(2) Acute	(3) Chronic	(4) Poor	(5) Acute	(6) Chronic	(7) Poor	(8) Acute	(9) Chronic	(10) Poor	(11) Acute	(12) Chronic
Health status : HH head	-0.042** (0.155)	-0.035** (0.119)	-0.274* (0.151)	-0.478*** (0.136)	-1.019*** (0.182)	-0.355** (0.154)	-0.782*** (0.181)	0.416 (0.439)	0.196 (0.201)	0.165 (0.161)	0.025 (0.133)	0.121 (0.092)
Health status : Spouse	-0.003 (0.095)	0.098 (0.209)	-0.036 (0.099)	-0.109 (0.072)	-0.315*** (0.090)	-0.298** (0.150)	-0.304** (0.144)	-2.902*** (0.617)	-0.393* (0.209)	-0.276*** (0.105)	-0.554*** (0.092)	-0.257*** (0.087)
Age	2.332*** (0.667)	3.564*** (0.803)	3.057*** (0.797)	-0.818*** (0.194)	-1.199*** (0.253)	0.361 (0.597)	1.228*** (0.132)	4.274** (2.150)	1.694*** (0.165)	-3.694*** (1.097)	0.307*** (0.068)	0.331*** (0.069)
Age squared	-0.003*** (0.000)	-0.002*** (0.001)	-0.003*** (0.001)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.001)	-0.009*** (0.001)	-0.015*** (0.002)	-0.013*** (0.001)	0.000 (0.001)	-0.002*** (0.000)	-0.002*** (0.000)
High school graduate	-0.001 (0.092)	-0.246** (0.111)	-0.038 (0.097)	0.476*** (0.082)	0.476*** (0.086)	0.644*** (0.101)	-0.577*** (0.183)	-1.488*** (0.338)	-0.830*** (0.216)	-0.804*** (0.171)	-0.375*** (0.092)	-0.399*** (0.092)
College graduate	0.055 (0.124)	0.427*** (0.152)	0.064 (0.132)	0.310*** (0.112)	0.241** (0.119)	0.545*** (0.146)	-0.809*** (0.227)	-1.059*** (0.388)	-1.070*** (0.272)	-0.456* (0.250)	-0.307** (0.123)	-0.342*** (0.123)
Family size	0.269*** (0.060)	0.142* (0.075)	0.238*** (0.067)	0.179*** (0.062)	0.114* (0.069)	0.027 (0.077)	0.076 (0.172)	0.355 (0.309)	0.224 (0.187)	-0.023 (0.090)	-0.022 (0.063)	-0.021 (0.064)

2 nd income quartile	0.069	-0.102	-0.006	-0.032	0.032	-0.008	-0.565**	-0.153	-0.117	0.454***	0.559***	0.495***
	(0.101)	(0.124)	(0.112)	(0.090)	(0.101)	(0.111)	(0.219)	(0.337)	(0.261)	(0.169)	(0.115)	(0.115)
3 rd income quartile	0.410***	0.268**	0.288***	0.194**	0.344***	0.253**	-0.617***	-0.219	-0.104	0.444***	0.253**	0.185*
	(0.095)	(0.116)	(0.104)	(0.085)	(0.096)	(0.106)	(0.210)	(0.332)	(0.260)	(0.161)	(0.113)	(0.113)
4 th income quartile	0.432***	0.434***	0.292***	0.011	0.074	0.048	-0.797***	-0.463	-0.469*	0.684***	0.207*	0.175
	(0.097)	(0.119)	(0.108)	(0.085)	(0.096)	(0.106)	(0.211)	(0.329)	(0.256)	(0.160)	(0.111)	(0.111)
5 th income quartile (highest)	0.661***	0.694***	0.528***	0.025	0.105	0.053	-0.786***	-0.563	-0.059	0.676***	0.311***	0.289**
	(0.102)	(0.126)	(0.115)	(0.090)	(0.102)	(0.113)	(0.231)	(0.375)	(0.288)	(0.168)	(0.118)	(0.118)
2 nd wealth quartile	0.823***	1.273***	0.708***	1.101***	1.045***	1.220***	2.834***	2.664***	2.712***	2.835***	2.025***	1.921***
	(0.122)	(0.153)	(0.135)	(0.104)	(0.120)	(0.137)	(0.196)	(0.268)	(0.216)	(0.346)	(0.182)	(0.180)
3 rd wealth quartile	1.142***	1.548***	1.079***	1.707***	1.787***	1.791***	5.403***	4.434***	5.005***	3.703***	3.221***	3.093***
	(0.128)	(0.160)	(0.142)	(0.115)	(0.132)	(0.149)	(0.228)	(0.299)	(0.250)	(0.351)	(0.187)	(0.185)
4 th wealth quartile	1.592***	2.065***	1.490***	2.257***	2.267***	2.292***	6.267***	5.410***	5.647***	4.897***	4.388***	4.296***
	(0.132)	(0.166)	(0.147)	(0.119)	(0.138)	(0.155)	(0.247)	(0.331)	(0.266)	(0.356)	(0.191)	(0.189)
5 th wealth quartile (highest)	2.176***	2.594***	1.933***	2.787***	2.780***	2.830***	7.984***	7.458***	7.738***	6.201***	5.751***	5.649***
	(0.139)	(0.174)	(0.157)	(0.127)	(0.147)	(0.166)	(0.287)	(0.403)	(0.329)	(0.365)	(0.198)	(0.197)
Year 2006	-4.148***	-6.785***	-5.521***	0.661*	1.446***	-1.726	0.474***	-4.172	0.338**	6.622***	-0.825***	-0.820***
	(1.335)	(1.610)	(1.597)	(0.371)	(0.492)	(1.192)	(0.129)	(4.279)	(0.160)	(2.182)	(0.067)	(0.067)
Year 2011	-13.693**	-23.654**	-18.966***	2.862**	5.611***	-5.805	0.820***	-15.091	0.944***	25.369***	-0.757***	-0.742***
	(4.669)	(5.629)	(5.588)	(1.297)	(1.720)	(4.172)	(0.244)	(14.963)	(0.294)	(7.642)	(0.130)	(0.131)
Health status*North dummy	0.007***	0.021***	0.006***	0.103	0.877***	-0.151	0.594	1.006	-2.456***	-0.033***	-0.126***	-0.140***
	(0.002)	(0.003)	(0.002)	(0.173)	(0.197)	(0.166)	(0.447)	(0.991)	(0.479)	(0.034)	(0.030)	(0.021)
Health status*South dummy	0.007***	0.017***	0.001	0.120	1.054	0.029	-0.247	1.059	-0.514	-0.137***	-0.090***	-0.032***
	(0.002)	(0.003)	(0.002)	(0.224)	(0.362)	(0.250)	(0.410)	(0.678)	(0.375)	(0.026)	(0.023)	(0.016)
No. of obs	15303	10584	11892	16839	13216	10844	5322	2255	3762	6251	11468	11483
LR chi-squared	844.3	747.92	557.36	818.71	727.42	536.98	2765.03	1129.53	2028.32	1185.82	2410.41	2444.49
Probability > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note 1. Dependent variables are a dummy variable indicating ownership of risky financial asset in columns 1-3, a dummy for ownership of savings for long-term investment in columns 4-6, a dummy for ownership of principal residence in columns 7-9, and a dummy variable for ownership of non-financial asset in columns 10-12. Robust standard errors are in parenthesis. All the estimates reported in the table are marginal effect.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

The coefficient for the interaction with the NHS dummy is negative and statistically significant. This indicates that a household in poor health condition has a lower probability of owning non-financial assets in all European countries in the sample, but the magnitude of the negative correlation between health and the probability of owning other non-financial assets is significantly smaller in non-NHS countries. This result is consistent with the findings of Berkowitz and Qui (2006) who found that health shocks have an asymmetric influence on household portfolio choices regarding financial and non-financial assets. They explained that health shocks have a more negative effect on financial asset choices because health shocks can have a more immediate effect on financial wealth than on non-financial wealth.

Table 5 presents one more analysis of the correlation between health and a household's decision to own a certain type of asset. This analysis explores regional variation in the relationship between health and portfolio choices. For this analysis, this study uses a model specification that includes interaction terms for the health variable and two regional indicators: a North dummy for northern European countries (Denmark and Sweden) and a South dummy for southern European countries (Italy and Spain). The reference group is the countries in central Europe: Austria, Belgium, France, Germany, the Netherlands, and Switzerland. All the estimates reported in this table are marginal effects. In all columns, the coefficients for the health status of household head/spouse are negative and statistically significant. This indicates that a household in poor health condition has a lower probability of owning risky financial assets (columns 1-3), savings for long-term investment (columns 4-6), a principal residence (columns 7-9), and other non-financial assets (columns 10-12). In the first three columns, the coefficients for the interaction terms with the North and South dummies are positive and statistically significant. Also in column 5, the coefficient for the interaction term with the North dummy is positive and statistically significant. That suggests that the magnitude of the negative correlation between health and the household decision to own risky financial assets is significantly smaller in northern and southern European countries than in central European countries. On the other hand, column 9 shows that the coefficient for the interaction term with the North dummy is negative and statistically significant. Columns 10-12 also show that the coefficients for the interaction terms with the North and South dummies are negative and statistically significant. That shows that the magnitude of the negative correlation between health and the probability of owning other non-financial assets is significantly smaller in the countries of central Europe than in northern and southern European countries. The regional variation in the magnitude of the negative correlation between health and household portfolio choices on asset ownership could stem from variations in countries' health care systems across regions. In fact, the countries in northern and southern Europe have NHS in which medical expenditures are mostly financed publicly and that provide easy access to health care services for almost all of the resident population.

Tables 3-5 display the negative correlation between health and a household's decision to own various types of financial and non-financial assets in all the European countries in the sample. This evidence contradicts the findings of Atella et al. (2012), who found that the negative correlation is observed only in non-NHS countries.

4.2 Health and Asset Allocation Decisions

The second part of this analysis investigates the relationship between health and a household's decision on how much household wealth to invest in each asset category (intensive margin). Table 6 (Note 8) reports the panel Tobit estimates on the relationship between health and the share of net wealth invested in five different types of assets: risky financial assets, savings for long-term investment, principal residence, other non-financial assets, and deposits in bank accounts. A negative estimate for the health variable indicates that households in poor health are more likely to invest a lower share of their net wealth in an asset category than households in good health.

Table 6. Health status and household's decision on asset share: panel tobit analysis

		Health status		
		Poor (1)	Acute (2)	Chronic (3)
Risky financial asset	Health status : HH head	-0.006 ^{***} (0.004)	-0.007 ^{***} (0.005)	-0.002 ^{***} (0.003)
	Health status : Spouse	-0.006 ^{***} (0.001)	-0.002 [*] (0.001)	-0.001 (0.001)
Savings for long-term	Health status : HH head	-0.009 [*]	-0.013 ^{**}	-0.018 ^{***}

investment		(0.005)	(0.006)	(0.004)
	Health status : Spouse	0.000	-0.003*	-0.007***
		(0.001)	(0.002)	(0.001)
Principal residence	Health status : HH head	-0.032***	-0.001***	-0.077***
		(0.008)	(0.011)	(0.007)
	Health status : Spouse	-0.001	0.005	-0.006***
		(0.002)	(0.002)	(0.002)
Non-financial asset	Health status : HH head	-0.017***	-0.027***	-0.009*
		(0.005)	(0.007)	(0.005)
	Health status : Spouse	-0.005***	-0.011***	0.000
		(0.001)	(0.002)	(0.001)
Bank deposits	Health status : HH head	0.008***	0.010***	0.050***
		(0.006)	(0.008)	(0.006)
	Health status : Spouse	0.006***	0.000	0.011***
		(0.002)	(0.002)	(0.002)

Note 1. Dependent variables are the share of net wealth invested in risky financial asset in the top panel, the share invested in savings for long-term investment in the second panel, the share invested in principal residence in the middle panel, the share invested in non-financial asset in the fourth panel, and the share allocated in bank deposits in the bottom panel. Columns 1-3 use three different health measures, POOR, ACUTE, and CHRONIC, respectively. This table reports a total of 15 pairs of estimates on health condition of household head/spouse from 15 separate specifications. Robust standard errors are in parenthesis.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

The top panel of Table 6 reports the correlation between health and the share invested in risky financial assets. In all three columns, the coefficients for the health of the household head/spouse are negative and statistically significant, which indicates that households in poor health tend to invest a lower share of their wealth in risky financial assets. The second panel shows the correlation between health and the share invested in savings for long-term investment. The coefficients for the health of the household head/spouse are negative and statistically significant, which suggests a negative relationship between poor health and the share of wealth invested in savings for long-term investment. In the third panel from the top, the coefficients for the health of the household head/spouse are negative and statistically significant, indicating that households in poor health tend to allocate a lower share of their wealth in their homes than households in good health. The fourth panel also shows a negative correlation between health and the share of wealth invested in other non-financial assets; that is, the share of household wealth invested in other non-financial assets is significantly lower among households in poor health.

An intriguing result is reported in the bottom panel. On a risk-return basis, bank deposits are generally dominated by other liquid assets. However, the previous literature has reported that when the health condition of household members deteriorates and incurs a potential increase in medical expenditures, households tend to increase the share of their wealth devoted to this asset category (Poterba & Samwick, 2001). Extending these results to this multi-nation comparison confirms that the findings remain the same in other countries. In the bottom panel, the coefficients for the health of the household head/spouse are positive and statistically significant, which indicates that households in poor health tend to allocate a larger share of their wealth to deposits (Note 9). This result is consistent with the findings of Colie and Milligan (2009), who reported an increase in precautionary savings among households in poor health.

Table 7. Household’s decision on asset share and health care system: panel tobit analysis

			Asset category											
Risky financial asset			Savings for long-term investment			Principal residence			Non-financial asset			Bank deposits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic

Health status :	-0.004***	-0.011***	-0.005	-0.006***	0.001	-0.006***	-0.017***	-0.025***	-0.002	0.000	-0.004	-0.005**	0.024***	0.022***	0.011***
HH head	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)	(0.004)	(0.004)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
Health status :	-0.004***	-0.009***	-0.001	-0.004**	0.000	0.001	-0.016***	0.010	-0.006 ^c	-0.012***	-0.023***	-0.012***	0.021***	0.000	0.017***
Spouse	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)	(0.003)	(0.004)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.004)	(0.002)
Age	0.005***	0.006***	0.006***	-0.019***	-0.019***	-0.019***	0.003 ^b	0.004**	0.003 ^b	-0.002	-0.001	0.000	0.025***	-0.026***	-0.027***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age squared	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000	0.000	0.000	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
High school graduate	0.006***	0.005***	0.005***	0.005***	0.005***	0.005***	-0.009***	-0.007***	-0.007***	-0.008***	-0.009***	-0.009***	0.013***	0.013***	0.013***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
College graduate	0.012***	0.009***	0.010***	0.007***	0.007***	0.007***	-0.004	-0.003	-0.003	-0.008***	-0.009***	-0.008***	0.012***	0.012***	0.011***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Family size	-0.005***	-0.004***	-0.005***	-0.004***	-0.002**	-0.002**	0.011***	0.011***	0.011***	0.004***	0.002	0.001	-0.010***	-0.011***	-0.011***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
2 nd income quartile	0.004***	0.004***	0.004***	0.000	0.001	0.001	-0.018***	-0.015***	-0.014***	-0.003	-0.005***	-0.005***	0.021***	0.023***	0.021***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
3 rd income quartile	0.011***	0.011***	0.011***	0.005***	0.008***	0.008***	-0.022***	-0.017***	-0.016***	-0.010***	-0.014***	-0.014***	0.026***	0.029***	0.028***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
4 th income quartile	0.018***	0.018***	0.019***	0.005***	0.007***	0.007***	-0.019***	-0.012***	-0.011***	-0.014***	-0.020***	-0.020***	0.025***	0.030***	0.029***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
5 th income quartile (highest)	0.024***	0.024***	0.025***	0.003***	0.007***	0.007***	-0.033***	-0.025***	-0.024***	-0.007***	-0.014***	-0.014***	0.032***	0.036***	0.035***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
2 nd wealth quartile	-0.001	0.003	0.002	0.015***	0.013***	0.013***	0.161***	0.156***	0.157***	0.031***	0.032***	0.033***	-0.092***	-0.093***	-0.094***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
3 rd wealth quartile	-0.009***	-0.002	-0.004***	0.014***	0.013***	0.014***	0.217***	0.197***	0.198***	0.047***	0.052***	0.053***	-0.143***	-0.140***	-0.141***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
4 th wealth quartile	-0.003 ^a	0.002	0.000**	0.016***	0.016***	0.017***	0.167***	0.144***	0.145***	0.075***	0.080***	0.081***	-0.147***	-0.141***	-0.143***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
5 th wealth quartile (highest)	0.016***	0.021***	0.018***	0.030***	0.033***	0.034***	0.062***	0.040***	0.041***	0.129***	0.129***	0.130***	-0.140***	-0.131***	-0.132***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
Year 2006	-0.005***	-0.004***	-0.004***	0.005***	0.002**	0.003**	0.011***	0.012***	0.012***	-0.005***	-0.006***	-0.005***	0.002	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Year 2011	-0.009***	-0.007***	-0.008***	-0.002 ^a	-0.004***	-0.004***	0.044***	0.037***	0.038***	0.021***	0.020***	0.021***	-0.014***	-0.013***	-0.015***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)

Health status*NHS dummy	-0.003 (0.002)	-0.007 (0.003)	-0.001 (0.002)	0.001 (0.003)	-0.003 (0.004)	0.001 (0.003)	0.030 (0.005)	0.039 (0.006)	0.002 (0.004)	0.000 (0.003)	0.010 (0.004)	0.011 (0.003)	-0.004*** (0.000)	-0.003*** (0.000)	-0.002*** (0.000)
No. of obs	125062	108656	108685	125062	108656	108685	122756	106511	106540	125062	108656	108685	125062	108656	108685
LR chi-squared	1646.23	1411.96	1367.4	2654.61	2497.8	2585.22	10334.34	8723.71	8837.27	5465.36	4630.19	4674.6	4456	3662.19	3968.24
Probability > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note 1. Dependent variables are the share of net wealth invested in risky financial asset in columns 1-3, the share invested in savings for long-term investment in columns 4-6, the share invested in principal residence in columns 7-9, the share invested in non-financial asset in columns 10-12, and the share invested in bank deposits in columns 13-15. Robust standard errors are in parenthesis.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

Table 8. Households’ decision to own asset: regional differences

	Asset category														
	Risky financial asset			Savings for long-term investment			Principal residence			Non-financial asset			Bank deposits		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic
Health status : HH head	-0.004** .	-0.002	-0.001	-0.003*	-0.007***	0.002	-0.018***	-0.018***	-0.018***	0.001	-0.007***	0.000	0.021***	0.020***	0.017***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)
Health status : Spouse	-0.008** .	-0.003**	-0.001	-0.003**	0.003	-0.007***	-0.012***	0.006	-0.011***	-0.007***	-0.016***	-0.008***	0.017***	0.003	0.013***
	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)
Age	0.006***	0.006***	0.006***	-0.018***	-0.019***	-0.019***	0.002	0.003**	0.003**	-0.002	-0.001	0.000	-0.025***	-0.026***	-0.026***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age squared	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000	0.000	0.000	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
High school graduate	0.005***	0.004***	0.004***	0.005***	0.005***	0.004***	-0.008***	-0.006***	-0.006***	-0.008***	-0.009***	-0.009***	0.012***	0.012***	0.012***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
College graduate	0.010***	0.009***	0.009***	0.006***	0.007***	0.006***	-0.003	-0.003	-0.003	-0.009***	-0.009***	-0.008***	0.011***	0.011***	0.011***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
Family size	-0.005** .	-0.004***	-0.005***	-0.003***	-0.002**	-0.002*	0.010***	0.011***	0.011***	0.005***	0.002*	0.001	-0.010***	-0.011***	-0.011***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
2 nd income quartile	0.005***	0.004***	0.004***	0.001	0.002	0.002	-0.019***	-0.015***	-0.014***	-0.002	-0.005***	-0.005***	0.023***	0.023***	0.022***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
3 rd income quartile	0.012***	0.011***	0.012***	0.006***	0.008***	0.009***	-0.023***	-0.017***	-0.015***	-0.010***	-0.014***	-0.014***	0.027***	0.029***	0.029***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
4 th income quartile	0.019***	0.018***	0.020***	0.006***	0.007***	0.008***	-0.021***	-0.012***	-0.011***	-0.014***	-0.021***	-0.021***	0.027***	0.030***	0.030***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)

	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
5 th income quartile (highest)	0.025***	0.025***	0.026***	0.004***	0.007***	0.008***	-0.034***	-0.025***	-0.024***	-0.007***	-0.014***	-0.014***	0.033***	0.036***	0.037***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
2 nd wealth quartile	-0.001	0.003**	0.002	0.015***	0.013***	0.014***	0.161***	0.156***	0.157***	0.031***	0.032***	0.033***	-0.092***	-0.093***	-0.087***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
3 rd wealth quartile	-0.008**	-0.001	-0.004**	0.014***	0.013***	0.014***	0.216***	0.196***	0.198***	0.048***	0.052***	0.052***	-0.143***	-0.140***	-0.131***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
4 th wealth quartile	-0.002	0.002	0.000	0.017***	0.017***	0.017***	0.166***	0.144***	0.145***	0.075***	0.080***	0.080***	-0.146***	-0.141***	-0.132***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
5 th wealth quartile (highest)	0.017***	0.021***	0.018***	0.030***	0.033***	0.034***	0.061***	0.040***	0.041***	0.129***	0.129***	0.130***	-0.139***	-0.131***	-0.120***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
Year 2006	-0.005**	-0.004***	-0.004***	0.005***	0.003***	0.003***	0.012***	0.012***	0.011***	-0.005***	-0.006***	-0.005***	0.001	0.000	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Year 2011	-0.009**	-0.007***	-0.007***	-0.003***	-0.003***	-0.004***	0.044***	0.037***	0.038***	0.020***	0.020***	0.021***	-0.014***	-0.013***	-0.008***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
Health status*North dummy	0.021***	0.013***	0.017***	0.009**	0.001	0.007***	-0.002	0.012	0.007	0.010	0.000	0.000	-0.004	-0.009	-0.003
	(0.003)	(0.003)	(0.002)	(0.003)	(0.004)	(0.003)	(0.006)	(0.007)	(0.005)	(0.004)	(0.004)	(0.003)	(0.005)	(0.005)	(0.004)
Health status*South dummy	-0.004*	-0.009***	-0.012***	-0.009***	-0.019***	-0.019***	-0.005***	-0.005***	-0.003***	-0.010***	-0.012***	-0.012***	-0.006***	-0.005***	-0.004***
	(0.002)	(0.003)	(0.002)	(0.003)	(0.004)	(0.003)	(0.000)	(0.001)	(0.000)	(0.003)	(0.004)	(0.003)	(0.000)	(0.001)	(0.000)
No. of obs	125062	108656	108685	125062	108656	108685	122756	106511	106540	125062	108656	108685	125062	108656	108685
LR chi-squared	1854.63	1404.34	1527.59	2771.83	2507.78	2740.58	10442.32	8739.79	8822.67	5478.49	4615.55	4964.11	4638.04	3739.84	3082.86
Probability > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note 1. Dependent variables are the share of net wealth invested in risky financial asset in columns 1-3, the share invested in savings for long-term investment in columns 4-6, the share invested in principal residence in columns 7-9, the share invested in non-financial asset in columns 10-12, and the share invested in bank deposits in columns 13-15. Robust standard errors are in parenthesis.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

Similar to the analysis in the previous section, this section also examines the differences in the relationship between health and household asset allocation choices depending on health care systems across countries to be comparable with Atella et al. (2012)’s findings. Table 7 shows the results from the panel Tobit analyses including an interaction term between the health variable and an NHS dummy. The coefficient for the interaction term captures the difference in the magnitude of the correlation between health and asset allocation decisions in countries with NHS.

The first three columns show the panel Tobit analysis results on a household’s asset allocation choices in risky financial assets. The coefficients for the health status of the household head/spouse are negative and statistically significant, which indicates that households in poor health tend to invest a lower share of their wealth in risky financial assets. However, the coefficient for the interaction with the NHS dummy is not different from zero at

any conventional significance level. Thus, a country's health care system has no influence on the correlation between health and the share of wealth invested in risky financial assets. The next three columns show the panel analysis result on household asset allocation decisions for savings for long-term investment. Again, the coefficients for the health of the household head/spouse are negative and statistically significant, but the coefficient for the interaction term with the NHS dummy is not statistically significant. This result implies that a country's health care system does not significantly affect the magnitude of the correlation between health and the share invested in financial assets. Columns 7-9 and columns 10-12 report the panel Tobit results when the dependent variables are the share of wealth invested in the primary residence and the share of wealth invested in other non-financial assets, respectively. In all six columns, the coefficients for the health status of the household head/spouse are negative and statistically significant. But the coefficient for the interaction term with the NHS dummy is not statistically significant, which indicates that there is no difference between countries with and without NHS in the magnitude of the correlation between health and asset allocation decisions for non-financial assets.

The last three columns of Table 7 report the panel Tobit results on household asset allocation decisions on liquid assets. The coefficients for the health of the household head/spouse are positive and statistically significant, which suggests that households in poor health tend to allocate a larger share of their wealth to liquid assets. The coefficient for the interaction with the NHS dummy is negative and statistically significant, which implies that the magnitude of the positive relationship between poor health and precautionary savings is smaller in countries with a more protective NHS. This implies that a more protective health care system via NHS provides some mediation in allocating wealth to liquid assets when facing an increased risk from a negative health shock.

Table 8 illustrates the regional differences in the correlation between health and the share invested in each type of asset. To explore regional differences in the correlation between health and the share invested in each type of asset, this table reports the panel Tobit results including interaction terms with the regional dummies for North (Denmark and Sweden) and South (Italy and Spain).

Overall, Table 8 also shows a negative correlation between health and the share invested in financial and non-financial assets. In columns 1-12, the coefficients for the health status of the household head/spouse are negative and statistically significant. Table 8 also shows a positive correlation between health and the share allocated to liquid assets. In columns 13-15, the coefficients for the health status of the household head/spouse are positive and statistically significant, which indicates that households in poor health tend to allocate a larger share of wealth to liquid assets. Table 8 also shows a significant regional variation in the magnitudes of the correlation between health and the share invested in each asset category. In all columns, the coefficient for the interaction with the South dummy is negative and statistically significant, which indicates that the magnitude of the negative correlation between health and the share invested in each type of asset is much greater in southern Europe. On the other hand, in columns 1-6, the coefficient for the interaction with the North dummy is positive and statistically significant, which suggests that the magnitude of the negative correlation between health and the share invested in each type of asset is much smaller in northern Europe.

Overall, the estimation results show that household portfolio decisions are negatively correlated with household health conditions. When people are in poor health, they are less likely to invest in each type of asset. Also, households in poor health tend to invest a smaller share of their net wealth in each type of asset. Instead, they tend to maintain a larger share of their assets in bank deposits, a very safe and liquid form of asset. This result implies that households in poor health condition have incentive to reallocate not only their financial assets but also their non-financial assets. They also have a higher incentive to maintain a larger share of their assets safely, but inter-country differences exist. There is no significant difference in the sign of the correlation between health condition and household portfolio choices across countries; however, the magnitude of the correlation varies. In NHS countries and northern European countries, the magnitude of the negative correlation is smaller.

Combined with the results on asset ownership choices, these results imply that the magnitude of the correlation between health and the probability of asset ownership decisions might vary between countries with more or less protective health care systems. However, the magnitude of the correlation between health and asset allocation decisions does not vary significantly regardless of a country's health care system.

5. Conclusion

This paper explored the relationship between health and household portfolio choices in European countries. Although previous studies have examined some aspects of this relationship, this study contributes to the literature in three ways. First, this study tested theoretical predictions for the relationship between health and household portfolio choices using a multi-national data set. Most existing literature has investigated the

relationship using only U.S. data sets. This study contributes to the literature by providing new empirical evidence for how health is associated with household portfolio choices outside the U.S. Second, this study carried out a comprehensive analysis on the correlation between health and households' portfolio choices in many asset classes. In particular, this study investigates how health is associated with both financial and non-financial assets, such as a principal residence or business. By examining portfolio choices in multiple asset categories, this study draws more precise conclusions on the relationship between health and portfolio choices. Finally, this study adopts panel data analysis models to control for unobserved household-specific fixed effects. Using panel data analysis models also allowed me to explore how households respond to changes in health status by changing their portfolio allocations.

The empirical evidence reported in this study suggests a negative correlation between health and household portfolio choices in many European countries. The panel logit analysis results indicate that households in poor health condition have a lower probability of holding risky financial assets, savings for long-term investment, a principal residence, and other non-financial assets. Moreover, the panel Tobit analysis results suggest that households in poor health condition tend to allocate a larger share of their wealth to bank deposits and a lower share in risky financial assets, savings for long-term investment, their principal residence, and other non-financial assets.

Typically, older households are considered to have considerable financial resources. These assets are important for the financial security of elderly households because they are used not only to finance everyday consumption during retirement but also provide households with a safety net against risky events in old age, such as negative health events. However, elderly households are increasingly likely to face more responsibility for managing their portfolios because many governments are shifting their public and private pension schemes from defined benefit to defined contribution plans. In addition, how health affects household wealth could have important implications for capital markets in many countries. The financial assets owned by elderly households present a sizeable share of total household net wealth, and household portfolio choices might have important implications for capital markets. The empirical findings of this study are expected to provide interesting insights to policy makers interested in the well-being of elderly households who are wrestling with the fiscal consequences of aging.

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Notes

Note 1. According to the report, the most commonly reported diseases are arthritis, diabetes, hypertension, and high cholesterol. The same report also shows that the prevalence of health problems increases steeply with age. The probability of having a stroke or cataract is 5 times higher among people older than 80 than among those in their 50s. The probability of high cholesterol or asthma and stomach problems is almost 2 times higher among the oldest people than among individuals in their 50s.

Note 2. Goldman and Maestas (2013) argue that health risk can be considered as background risk because it is not fully insurable as well as being beyond one's control. Negative health shocks expose individuals or households to risk by deteriorating one's health condition as well as by incurring unexpected increases in medical expenditures. While the risk from unexpected medical expenditure can be covered by purchasing health insurance, a health condition itself is not tradable across agents and is beyond one's control. From this point of view, health risk can be considered as an uninsurable background risk.

Note 3. Since the fourth wave of the survey, SHARE categorized various types of financial assets into three groups; bank accounts, risky financial asset including bonds, stocks, and mutual funds, and savings for long-term investment including contractual savings for housing, individual retirement accounts, and whole life insurance. This study follows the same asset categorization.

Note 4. A natural question in this context is whether the cumulative effect when both spouses are ill is different from the sum of the individual effects. To investigate this issue, I augmented each equation with an interaction between the husband's and wife's health variables. It turns out that these interactions are not significant for any of the assets, so that the joint effect when both spouses are in poor health is approximately equal to the sum of the individual spouse's effects.

Note 5. Given that a large fraction of households do not hold a certain type of asset, Ordinary Least Squares (OLS) regression is unsuitable to study the share invested in each asset category. Several theoretical papers have treated non-participation (i.e., zero asset holdings) as part of a household's portfolio choice. In this framework, agents maximize their lifetime utility subject to a budget constraint that includes participation cost. Researchers have used a variety of econometric methods to address this issue. For example, Heaton and Lucas (2000) used OLS estimation after eliminating those sample individuals whose asset holdings fell below a certain level. On the other hand, Bertaut and Starr-McCluer (2000) used Heckman's selectivity bias correction to account for the fact that many of the portfolio shares are zeros. This study followed Poterba and Samwick (1997) and used a Tobit estimator. The empirical results using a Tobit estimator are effectively identical to those using the Heckman correction method. This study reports only the Tobit results.

Note 6. Table 3 reports the fixed effect logit estimates for the health condition of the household head and spouse from the analysis of the relationship between health and the probability of owning four different types of assets using three different health measures. The top panel reports the fixed effect logit analysis on the relationship

between health and the probability of owning risky financial assets. The second and the third panels show the analysis results on the probability of owning savings for long-term investment and a home, respectively. The bottom panel shows the estimates on the probability of owning other non-financial assets. Columns 1-3 show the fixed effect logit estimates using three different health measures—POOR, ACUTE, and CHRONIC—respectively. In other words, Table 3 shows a summary of 12 separate empirical analyses. Appendix Table 2 reports the full estimation results of the 12 separate analyses.

Note 7. In a model with household-specific fixed effects, a simple dummy for NHS countries cannot be included because of the perfect collinearity problem. To examine the potential difference in the relationship between health and the probability of owning an asset between NHS countries and non-NHS countries, this study includes an interaction term between the health variable and a dummy for NHS countries.

Note 8. Table 6 is a summary of 15 pairs of estimates for the health status of household head and spouse from 15 separate panel Tobit analyses on the relationship between health and portfolio decisions on the share invested in five different types of assets using three different health measures.

Note 9. Considering that a person experiences a loss of income and a potential increase in medical expenses when he/she becomes sick, a rising share invested in liquid assets might seem unreasonable. Several explanations have been presented in the previous literature. The first is that an increase in liquid assets is a temporary result of a recipient receiving insurance money or proceeds from home sales. The second explanation is the liquidity effect. Initially, poor health might reduce households' liquid financial assets more than their non-financial assets. However, households in poor health condition might want to reserve more assets in liquid form for a potential increase in medical expenditures. Using data from the U.S., Collie and Milligan (2009) found little evidence to support this liquidity effect with poor health. They found that the share of assets invested in liquid assets increased only in households whose members lost their spouses. The empirical results reported in this paper provide stronger support for their hypothesis.

Appendix Table 9. Health system in Europe

		Austria	Belgium	Denmark	France	Germany	Italy	Netherlands	Spain	Sweden	Switzerland nd
Health system											
Organizational structure		SHI	SHI	NHS	SHI	SHI	NHS	SHI	NHS	NHS	SHI
Funding of health care system		Dominantly SHI-based	Dominantly SHI-based	General taxation	Dominantly SHI-based	Dominantly SHI-based	General taxation	Dominantly SHI-based	General taxation	General taxation	Dominan tly SHI-base d
Competition among health insurance funds		No	No	No	No	No	No	Yes	No	No	Yes
Membership base		Occupation / region	Occupation / region	Universa l coverage	Occupation / region	Occupation / region	Universa l coverage	Occupation / region	Universa l coverage	Universal coverage	Occupati on / region
Expenditure on health											
Public and private expenditure on health (as % of GDP, 2004)	Public	5.3	6.4	7.1	7.2	8	6.3	5.7	5.4	7.4	n.a.
	Private	2.7	2.5	1.3	2.4	2.8	2.1	3.2	2.1	1.3	n.a.
Total expenditure on health per person (Euro, 2002)		2,220	2,515	2,580	2,736	2,817	2,166	2,643	1,646	2,517	n.a.
Health care resources											
No. of health care providers (per 100,000 people, 2004)	Nurses	587	1,075	967	688	973	296	1,328	367	975	n.a.
	Physicians	332	447	364	333	335	606	314	324	304	n.a.
	Hospital beds	609	582	340	396	627	394	307	296	228	n.a.

*(1) SHI: Social Health Insurance, (2) PHI: predominantly private health insurance, (3) NHS: National Health Service.

Source: Grosse-Tebbe and Figueras (2004).

Appendix Table 10. Health status and households' decision to own an asset: panel logit analysis

	Asset category											
	Risky financial asset			Savings for long-term investment			Principal residence			Non-financial asset		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic
Health status : HH head	-0.686** (0.338)	-0.391* (0.220)	-0.369* (0.154)	-0.627*** (0.167)	-0.941*** (0.191)	-0.190 (0.151)	-0.337 (0.556)	1.182 (1.504)	-1.143* (0.600)	-3.001** (1.369)	-0.026 (0.450)	-0.743*** (0.214)
Health status : Spouse	0.016 (0.095)	0.610 (0.149)	-0.063 (0.100)	-0.079 (0.062)	-0.510*** (0.131)	-0.382*** (0.092)	-0.271* (0.147)	-3.078*** (0.636)	0.064 (0.545)	-0.087 (0.085)	-0.549*** (0.093)	0.095 (0.139)
Age	2.192*** (0.676)	3.544*** (0.804)	2.811*** (0.813)	-0.799*** (0.194)	-0.192 (0.634)	-0.119 (0.623)	1.221*** (0.133)	7.621** (3.261)	3.955** (1.868)	0.727*** (0.211)	0.317*** (0.069)	-4.228*** (1.233)
Age squared	-0.003*** (0.000)	-0.002*** (0.001)	-0.003*** (0.001)	0.003*** (0.000)	0.003*** (0.001)	0.004*** (0.001)	-0.009*** (0.001)	-0.018*** (0.002)	-0.014*** (0.002)	-0.001** (0.001)	-0.002*** (0.000)	-0.001* (0.001)
High school graduate	0.013 (0.092)	-0.335*** (0.112)	-0.021 (0.098)	0.455*** (0.082)	0.360*** (0.090)	0.352*** (0.090)	-0.588*** (0.185)	-1.688*** (0.374)	-1.862*** (0.343)	-0.475*** (0.116)	-0.376*** (0.093)	-0.475*** (0.125)
College graduate	0.082 (0.124)	0.370** (0.152)	0.141 (0.134)	0.283** (0.112)	0.198 (0.122)	0.211* (0.122)	-0.802*** (0.228)	-1.339*** (0.422)	-1.638*** (0.418)	-0.322* (0.167)	-0.308** (0.124)	-0.379** (0.183)
Family size	0.271*** (0.060)	0.161** (0.075)	0.228*** (0.067)	0.170*** (0.062)	0.133* (0.070)	0.086 (0.070)	0.048 (0.174)	0.209 (0.318)	0.237 (0.312)	0.124* (0.072)	-0.035 (0.064)	-0.085 (0.088)
2 nd income quartile	0.079 (0.102)	-0.100 (0.124)	-0.065 (0.113)	-0.045 (0.090)	0.061 (0.104)	-0.019 (0.103)	-0.602*** (0.223)	-0.264 (0.348)	-0.050 (0.344)	0.339** (0.132)	0.570*** (0.116)	0.456*** (0.149)
3 rd income quartile	0.391*** (0.095)	0.264** (0.117)	0.261** (0.105)	0.180*** (0.085)	0.317*** (0.098)	0.218** (0.099)	-0.651*** (0.213)	-0.487 (0.349)	-0.335 (0.346)	0.208* (0.125)	0.250** (0.113)	0.133 (0.143)
4 th income quartile	0.412*** (0.098)	0.431*** (0.119)	0.254** (0.109)	-0.014 (0.086)	0.069 (0.099)	-0.006 (0.099)	-0.848*** (0.213)	-0.620* (0.346)	-0.411 (0.335)	0.461*** (0.123)	0.217* (0.111)	0.226 (0.140)
5 th income quartile (highest)	0.637*** (0.103)	0.654*** (0.126)	0.494*** (0.116)	-0.001 (0.090)	0.060 (0.105)	-0.016 (0.105)	-0.858*** (0.233)	-0.720* (0.389)	-0.806** (0.397)	0.332** (0.131)	0.320*** (0.118)	0.264* (0.153)
2 nd wealth quartile	0.832*** (0.122)	1.465*** (0.159)	0.690*** (0.136)	1.108*** (0.104)	1.074*** (0.123)	1.033*** (0.122)	2.788*** (0.199)	2.594*** (0.273)	2.905*** (0.289)	1.794*** (0.204)	2.035*** (0.183)	2.350*** (0.280)
3 rd wealth quartile	1.160*** (0.128)	1.715*** (0.165)	1.066*** (0.143)	1.715*** (0.115)	1.847*** (0.135)	1.807*** (0.135)	5.425*** (0.231)	4.438*** (0.303)	4.886*** (0.331)	2.668*** (0.209)	3.218*** (0.188)	3.491*** (0.287)
4 th wealth quartile	1.616*** (0.132)	2.234*** (0.171)	1.480*** (0.148)	2.267*** (0.120)	2.338*** (0.142)	2.346*** (0.142)	6.248*** (0.249)	5.439*** (0.334)	5.450*** (0.340)	3.649*** (0.212)	4.404*** (0.191)	4.495*** (0.291)
5 th wealth quartile (highest)	2.199*** (0.139)	2.751*** (0.178)	1.932*** (0.158)	2.794*** (0.127)	2.839*** (0.151)	2.849*** (0.151)	7.970*** (0.288)	7.448*** (0.407)	7.934*** (0.432)	5.209*** (0.221)	5.751*** (0.199)	5.974*** (0.302)
Year 2006	-3.872*** (1.352)	-6.644*** (1.611)	-5.031*** (1.627)	0.630* (0.372)	-0.537 (1.265)	-0.708 (1.245)	0.516*** (0.131)	-10.101 (6.442)	-4.175 (3.668)	-1.738*** (0.395)	-0.811*** (0.068)	8.045*** (2.459)
Year 2011	-12.707** (4.727)	-23.218** (5.634)	-17.248** (5.695)	2.791** (1.298)	-1.514 (4.429)	-2.400 (4.354)	0.858*** (0.250)	-36.034 (22.570)	-14.295 (12.851)	-3.837*** (1.370)	-0.754*** (0.132)	30.449*** (8.612)

No. of obs	15303	10584	11892	16839	13216	10844	5322	2255	3762	6251	11468	11483
LR chi-squared	844.3	747.92	557.36	818.71	727.42	536.98	2765.03	1129.53	2028.32	1185.82	2410.41	2444.49
Probability > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note. Dependent variables are a dummy variable indicating ownership of risky financial asset in columns 1-3, a dummy for ownership of savings for long-term investment in columns 4-6, a dummy for ownership of principal residence in columns 7-9, and a dummy variable for ownership of non-financial asset in columns 10-12. Robust standard errors are in parenthesis. All the estimates reported in the table are marginal effect.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

Appendix Table 11. Health status and household’s decision on asset share: panel tobit analysis

	Asset category														
	Risky financial asset			Savings for long-term investment			Principal residence			Non-financial asset			Bank deposits		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic	Poor	Acute	Chronic
Health status: HH head	-0.006*** (0.004)	-0.007*** (0.005)	-0.002*** (0.003)	-0.009* (0.005)	-0.013** (0.006)	-0.018*** (0.004)	-0.032*** (0.008)	-0.001*** (0.011)	-0.077*** (0.007)	-0.017*** (0.005)	-0.027*** (0.007)	-0.009* (0.005)	0.008*** (0.006)	0.010*** (0.008)	0.050*** (0.006)
Health status: Spouse	-0.006*** (0.001)	-0.002* (0.001)	-0.001 (0.001)	0.000 (0.001)	0.003* (0.002)	-0.007*** (0.001)	-0.001 (0.002)	0.005 (0.002)	-0.006*** (0.002)	-0.005*** (0.001)	-0.011*** (0.002)	0.000 (0.001)	0.006*** (0.002)	0.000 (0.002)	0.011*** (0.002)
Age	0.005*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	-0.019*** (0.001)	-0.019*** (0.001)	-0.019*** (0.001)	0.002 (0.002)	0.003** (0.002)	0.003** (0.002)	-0.001 (0.001)	0.000 (0.001)	0.000 (0.001)	-0.025*** (0.001)	-0.026*** (0.001)	-0.027*** (0.001)
Age squared	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
High school graduate	0.005*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	-0.008*** (0.002)	-0.006*** (0.002)	-0.007*** (0.002)	-0.008*** (0.001)	-0.010*** (0.001)	-0.009*** (0.001)	0.013*** (0.002)	0.012*** (0.002)	0.012*** (0.002)
College graduate	0.011*** (0.001)	0.009*** (0.001)	0.010*** (0.001)	0.007*** (0.002)	0.007*** (0.002)	0.007*** (0.002)	-0.004 (0.003)	-0.002 (0.003)	-0.003 (0.003)	-0.009*** (0.002)	-0.009*** (0.002)	-0.008*** (0.002)	0.012*** (0.002)	0.011*** (0.003)	0.011*** (0.003)
Family size	-0.005*** (0.001)	-0.004*** (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	-0.002** (0.001)	-0.002** (0.001)	0.011*** (0.002)	0.011*** (0.002)	0.011*** (0.002)	0.005*** (0.001)	0.002 (0.001)	0.001 (0.001)	-0.011*** (0.001)	-0.011*** (0.001)	-0.011*** (0.001)
2 nd income quartile	0.005*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.000 (0.002)	0.001 (0.002)	0.001 (0.002)	-0.020*** (0.003)	-0.015*** (0.003)	-0.015*** (0.003)	-0.002 (0.002)	-0.005*** (0.002)	-0.005*** (0.002)	0.022*** (0.002)	0.023*** (0.002)	0.022*** (0.002)
3 rd income quartile	0.011*** (0.001)	0.011*** (0.001)	0.011*** (0.001)	0.006*** (0.002)	0.008*** (0.002)	0.008*** (0.002)	-0.024*** (0.003)	-0.017*** (0.003)	-0.016*** (0.003)	-0.010*** (0.002)	-0.014*** (0.002)	-0.014*** (0.002)	0.027*** (0.002)	0.029*** (0.002)	0.029*** (0.002)
4 th income quartile	0.019*** (0.001)	0.018*** (0.001)	0.020*** (0.001)	0.005*** (0.002)	0.007*** (0.002)	0.008*** (0.002)	-0.021*** (0.003)	-0.013*** (0.003)	-0.012*** (0.003)	-0.013*** (0.002)	-0.020*** (0.002)	-0.021*** (0.002)	0.026*** (0.002)	0.030*** (0.002)	0.029*** (0.002)
5 th income	0.024*** (0.001)	0.025*** (0.001)	0.026*** (0.001)	0.003* (0.002)	0.007*** (0.002)	0.007*** (0.002)	-0.034*** (0.003)	-0.026*** (0.003)	-0.025*** (0.003)	-0.007*** (0.002)	-0.014*** (0.002)	-0.014*** (0.002)	0.033*** (0.002)	0.036*** (0.002)	0.035*** (0.002)

quartile (highest)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
2 nd wealth quartile	-0.001	0.003**	0.002	0.015***	0.013***	0.013***	0.161***	0.156***	0.156***	0.031***	0.032***	0.033***	-0.092***	-0.093***	-0.094***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
3 rd wealth quartile	-0.008***	-0.001	-0.004**	0.014***	0.013***	0.013***	0.216***	0.196***	0.197***	0.048***	0.052***	0.052***	-0.143***	-0.140***	-0.141***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
4 th wealth quartile	-0.002	0.002	0.000	0.016***	0.016***	0.017***	0.165***	0.143***	0.144***	0.075***	0.080***	0.080***	-0.146***	-0.141***	-0.143***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
5 th wealth quartile (highest)	0.017***	0.021***	0.018***	0.030***	0.033***	0.034***	0.060***	0.039***	0.039***	0.130***	0.129***	0.130***	-0.139***	-0.131***	-0.132***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)
Year 2006	-0.005***	-0.004***	-0.004***	0.006**	0.002***	0.003**	0.012***	0.012***	0.011***	-0.005***	-0.006***	-0.005***	0.002	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Year 2011	-0.009***	-0.007***	-0.007***	-0.002	-0.004***	-0.004***	0.044***	0.037***	0.038***	0.020***	0.020***	0.020***	-0.014***	-0.013***	-0.015***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
No. of obs	125062	108656	108685	125062	108656	108685	122756	106511	106540	125062	108656	108685	125062	108656	108685
LR chi-squared	1775.82	1572.62	1803.04	2713.99	1572.62	2698.02	10393.46	8883.32	9007.7	5510.18	4647.8	4662.35	4587.02	3778.06	4113.41
Probability > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note. Dependent variables are the share of net wealth invested in risky financial asset in columns 1-3, the share invested in savings for long-term investment in columns 4-6, the share invested in principal residence in columns 7-9, the share invested in non-financial asset in columns 10-12, and the share invested in bank deposits in columns 13-15. Robust standard errors are in parenthesis.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

Appendix Table 12. Health status and household's decision to own an asset: panel logit analysis

		Austria	Belgium	Denmark	France	Germany	Italy	Netherlands	Spain	Sweden	Switzerland
Risky financial asset											
Poor	HH head	0.000	-0.033***	-0.048***	-0.034***	-0.103***	-0.024***	-0.048**	0.007	-0.042***	-0.114***
		(0.006)	(0.009)	(0.013)	(0.009)	(0.010)	(0.009)	(0.022)	(0.005)	(0.010)	(0.017)
	Spouse	-0.045***	-0.010	-0.052***	-0.009	0.004	-0.008	-0.133***	-0.010**	-0.031***	-0.027
		(0.007)	(0.009)	(0.013)	(0.009)	(0.010)	(0.009)	(0.036)	(0.005)	(0.009)	(0.016)
Acute	HH head	-0.117***	-0.114***	-0.101**	-0.070**	-0.127***	-0.017	-0.178***	-0.067	-0.068**	-0.042
		(0.038)	(0.038)	(0.047)	(0.032)	(0.040)	(0.016)	(0.037)	(0.036)	(0.033)	(0.046)
	Spouse	0.059	0.022	0.019	0.063	0.039	-0.140***	0.052	0.036	-0.018	-0.412***
		(0.073)	(0.029)	(0.036)	(0.043)	(0.034)	(0.027)	(0.053)	(0.035)	(0.031)	(0.126)
Chronic	HH head	-0.003	0.017	-0.004	0.049	-0.007	0.036	-0.033***	0.001	-0.004	0.004
		(0.005)	(0.033)	(0.011)	(0.042)	(0.011)	(0.028)	(0.009)	(0.005)	(0.008)	(0.058)

	Spouse	-0.001 (0.005)	-0.094*** (0.032)	-0.017 (0.011)	-0.141*** (0.047)	-0.010 (0.011)	0.012 (0.015)	0.006 (0.009)	0.000 (0.005)	0.013 (0.008)	0.075 (0.053)
Savings for long-term investment											
Poor	HH head	-0.051*** (0.011)	-0.029 (0.043)	-0.066*** (0.015)	-0.042*** (0.009)	-0.072** (0.032)	-0.012** (0.005)	0.095*** (0.011)	-0.015** (0.007)	-0.031*** (0.012)	0.024 (0.019)
	Spouse	0.012 (0.011)	-0.110*** (0.033)	-0.008 (0.015)	-0.014* (0.008)	0.002 (0.028)	-0.016*** (0.005)	0.007 (0.010)	-0.024*** (0.006)	0.012 (0.011)	0.011 (0.017)
Acute	HH head	-0.195*** (0.076)	-0.005 (0.012)	-0.077*** (0.017)	-0.078* (0.040)	-0.003 (0.015)	0.030 (0.025)	0.041 (0.025)	-0.023** (0.009)	-0.026** (0.013)	-0.130** (0.059)
	Spouse	-0.062 (0.087)	-0.020* (0.012)	-0.084*** (0.018)	-0.016 (0.043)	-0.047*** (0.014)	-0.051** (0.021)	-0.016 (0.032)	-0.034*** (0.008)	-0.051*** (0.013)	-0.260*** (0.046)
Chronic	HH head	0.073 (0.061)	-0.024 (0.023)	-0.093*** (0.029)	-0.015* (0.008)	-0.110*** (0.029)	-0.017*** (0.005)	0.095*** (0.010)	0.026 (0.020)	0.002 (0.010)	0.024 (0.052)
	Spouse	0.048 (0.049)	-0.004 (0.022)	-0.054** (0.028)	-0.009 (0.008)	-0.041 (0.029)	0.007 (0.005)	0.070*** (0.010)	-0.018 (0.020)	-0.033*** (0.011)	0.026 (0.034)
Principal residence											
Poor	HH head	-0.001 (0.014)	-0.003 (0.004)	-0.001 (0.007)	0.000 (0.006)	0.048 (0.059)	-0.002 (0.004)	-0.030*** (0.011)	-0.029*** (0.009)	0.009 (0.008)	-0.080 (0.086)
	Spouse	-0.008 (0.014)	-0.009** (0.004)	-0.018** (0.008)	0.004 (0.006)	0.056 (0.055)	-0.009** (0.004)	-0.032*** (0.010)	-0.001 (0.008)	-0.005 (0.008)	-0.438*** (0.126)
Acute	HH head	-0.020 (0.018)	-0.008 (0.013)	-0.001 (0.008)	-0.006 (0.021)	-0.040*** (0.016)	0.008 (0.005)	0.018 (0.012)	-0.017 (0.015)	0.000 (0.032)	0.024 (0.016)
	Spouse	-0.035** (0.017)	-0.029** (0.016)	-0.013 (0.009)	-0.025 (0.023)	-0.025* (0.015)	-0.016*** (0.006)	-0.023* (0.013)	0.004 (0.003)	-0.068* (0.043)	-0.003 (0.018)
Chronic	HH head	-0.037*** (0.013)	-0.008** (0.004)	0.009 (0.006)	-0.016*** (0.005)	-0.056*** (0.012)	-0.003 (0.004)	0.033 (0.039)	0.003 (0.002)	-0.008 (0.015)	-0.007 (0.013)
	Spouse	-0.036*** (0.013)	-0.003 (0.004)	-0.030*** (0.006)	-0.006 (0.006)	0.016 (0.012)	0.011** (0.004)	-0.059 (0.042)	-0.002 (0.002)	0.013 (0.008)	0.004 (0.012)
Non-financial asset											
Poor	HH head	-0.006 (0.008)	-0.018** (0.008)	-0.023 (0.014)	-0.002 (0.009)	-0.006 (0.007)	-0.006 (0.010)	0.006 (0.006)	-0.016* (0.009)	-0.013 (0.014)	-0.175*** (0.048)
	Spouse	-0.024*** (0.008)	-0.017** (0.007)	-0.016 (0.014)	-0.023*** (0.009)	-0.026*** (0.007)	-0.003 (0.009)	-0.021*** (0.005)	0.009 (0.009)	-0.056*** (0.014)	0.094 (0.097)
Acute	HH head	0.016 (0.010)	-0.026*** (0.008)	0.059 (0.066)	-0.125** (0.052)	-0.024*** (0.008)	0.007 (0.014)	-0.006 (0.006)	0.126 (0.095)	0.009 (0.015)	-0.035 (0.044)
	Spouse	-0.016 (0.016)	0.015 (0.015)	-0.005 (0.015)	-0.088 (0.088)	-0.024*** (0.008)	0.006 (0.014)	-0.029*** (0.006)	0.046 (0.095)	-0.005 (0.015)	-0.073 (0.044)

		(0.010)	(0.009)	(0.054)	(0.068)	(0.008)	(0.013)	(0.005)	(0.083)	(0.015)	(0.056)
Chronic	HH head	-0.006	-0.022***	-0.050***	-0.002	-0.028	-0.005	-0.003	-0.017	-0.025**	-0.007
		(0.008)	(0.007)	(0.011)	(0.008)	(0.017)	(0.043)	(0.005)	(0.037)	(0.012)	(0.012)
	Spouse	-0.012	-0.003	-0.001	-0.010	0.016	-0.103**	-0.012***	0.055	-0.005	-0.059***
		(0.007)	(0.007)	(0.011)	(0.008)	(0.015)	(0.043)	(0.004)	(0.039)	(0.012)	(0.012)

Note 1. Dependent variables are a dummy variable indicating household's ownership of risky financial asset in the top panel, a dummy for ownership of savings for long-term investment in the second panel, a dummy for ownership of principal residence in the third panel, and a dummy for ownership of non-financial asset in the bottom panel. For each asset category, three different health measures-POOR, ACUTE, and CHRONIC-are used. This table reports a total of 120 pairs of coefficients for health condition of household head/spouse from 12 separate specifications for each of 10 participating countries. All the models include control variables listed in the data section. All the reported estimates are marginal effect. Robust standard errors are in parenthesis.

Note 2. "****" indicates that the estimate is statistically significant at the 1 percent significance level, "***" at the 5 percent significance level, and "**" at the 10 percent significance level.

Appendix Table 13. Health status and household decision on asset share: panel tobit analysis

		Austria	Belgium	Denmark	France	Germany	Italy	Netherlands	Spain	Sweden	Switzerland
Risky financial asset											
Poor	HH head	0.007	-0.001	-0.019***	-0.015***	-0.061***	-0.009	-0.014*	0.014	-0.023***	-0.064***
		(0.012)	(0.006)	(0.007)	(0.004)	(0.006)	(0.007)	(0.008)	(0.009)	(0.005)	(0.013)
	Spouse	-0.094***	-0.024***	0.003	-0.009**	-0.009	-0.017**	0.004	-0.044***	-0.003	-0.010
		(0.011)	(0.005)	(0.007)	(0.004)	(0.006)	(0.007)	(0.008)	(0.009)	(0.006)	(0.011)
Acute	HH head	-0.246***	0.026	-0.054***	-0.011***	-0.071**	0.020	-0.047***	-0.105***	0.007	0.070
		(0.072)	(0.017)	(0.016)	(0.004)	(0.033)	(0.020)	(0.010)	(0.015)	(0.006)	(0.067)
	Spouse	-0.002	-0.025***	-0.015*	0.007	0.004	-0.032***	0.003	-0.014***	-0.006	-0.133***
		(0.084)	(0.009)	(0.009)	(0.004)	(0.011)	(0.012)	(0.010)	(0.005)	(0.006)	(0.039)
Chronic	HH head	-0.058*	0.013	-0.001	-0.046***	-0.004	-0.023***	-0.021***	-0.010	-0.035***	0.029
		(0.031)	(0.014)	(0.005)	(0.009)	(0.006)	(0.007)	(0.007)	(0.010)	(0.011)	(0.038)
	Spouse	-0.023	-0.026*	0.005	0.010	0.001	-0.001	0.010	0.003	-0.032***	0.041
		(0.020)	(0.013)	(0.005)	(0.010)	(0.006)	(0.007)	(0.007)	(0.010)	(0.011)	(0.030)
Savings for long-term investment											
Poor	HH head	-0.020	0.003	-0.044***	-0.028***	-0.059***	-0.001	0.017	-0.037***	-0.024***	0.073
		(0.026)	(0.016)	(0.010)	(0.007)	(0.016)	(0.012)	(0.024)	(0.008)	(0.007)	(0.053)
	Spouse	0.003	-0.030**	0.006	0.001	0.008	-0.033***	0.006	-0.029***	-0.011	-0.043***
		(0.027)	(0.013)	(0.010)	(0.014)	(0.009)	(0.011)	(0.017)	(0.008)	(0.007)	(0.016)
Acute	HH head	-0.010**	-0.006	-0.028**	-0.086***	-0.055*	0.041	0.028	-0.023	-0.069***	0.082
		(0.004)	(0.005)	(0.011)	(0.023)	(0.029)	(0.025)	(0.017)	(0.015)	(0.015)	(0.053)
	Spouse	-0.109***	0.006	-0.042***	-0.073**	-0.097***	0.065	0.056	-0.040***	-0.044*	-0.135**
		(0.005)	(0.006)	(0.012)	(0.033)	(0.028)	(0.066)	(0.042)	(0.013)	(0.023)	(0.056)
Chronic	HH head	-0.019	0.008	-0.063***	*0.007***	-0.057***	-0.127	0.005	0.014	0.016	0.054
		(0.035)	(0.010)	(0.017)	(0.004)	(0.020)	(0.036)	(0.020)	(0.009)	(0.014)	(0.036)
	Spouse	0.037	0.004	0.005	0.007	0.030	-0.112***	0.025	-0.030***	-0.023*	-0.015
		(0.030)	(0.009)	(0.018)	(0.004)	(0.021)	(0.035)	(0.022)	(0.009)	(0.014)	(0.018)

		Principal residence									
Poor	HH head	0.012 (0.013)	-0.018 (0.026)	0.035 (0.032)	0.023 (0.032)	-0.048 [*] (0.027)	0.007 (0.021)	-0.169 ^{***} (0.044)	0.007 (0.006)	0.034 (0.031)	0.043 (0.133)
	Spouse	-0.016 (0.013)	0.011 (0.021)	-0.067 [*] (0.037)	0.024 (0.024)	-0.011 (0.034)	0.011 (0.018)	-0.097 [*] (0.055)	-0.027 ^{***} (0.006)	-0.065 ^{**} (0.033)	-0.068 ^{***} (0.148)
Acute	HH head	-0.021 (0.016)	-0.048 ^{***} (0.019)	-0.017 (0.015)	-0.014 (0.009)	0.012 (0.013)	0.014 (0.009)	0.022 (0.018)	0.004 (0.009)	0.005 (0.035)	0.002 (0.018)
	Spouse	-0.013 (0.016)	-0.081 ^{***} (0.018)	0.007 (0.016)	0.007 (0.009)	-0.015 (0.012)	0.000 (0.009)	-0.008 (0.017)	-0.061 ^{***} (0.008)	0.054 (0.037)	-0.042 ^{***} (0.023)
Chronic	HH head	-0.039 ^{***} (0.012)	-0.003 (0.006)	0.037 (0.040)	-0.013 [*] (0.007)	-0.041 [*] (0.024)	0.008 (0.007)	0.001 (0.010)	0.030 (0.023)	-0.025 (0.022)	0.048 (0.031)
	Spouse	-0.052 ^{***} (0.012)	0.001 ^{***} (0.006)	-0.093 (0.033)	0.004 (0.007)	0.015 (0.011)	-0.005 (0.007)	-0.048 ^{***} (0.009)	-0.043 ^{**} (0.022)	0.013 (0.011)	0.050 (0.074)
		Non-financial asset									
Poor	HH head	0.006 (0.025)	-0.011 (0.012)	0.011 (0.016)	0.017 (0.012)	0.015 (0.015)	-0.014 (0.012)	0.028 (0.021)	-0.027 ^{**} (0.012)	-0.010 (0.012)	0.157 (0.099)
	Spouse	-0.040 [*] (0.024)	-0.020 [*] (0.011)	-0.003 (0.016)	-0.047 ^{***} (0.012)	-0.036 ^{**} (0.015)	-0.009 (0.011)	-0.079 ^{***} (0.021)	0.002 (0.012)	-0.052 ^{***} (0.012)	-0.161 ^{**} (0.071)
Acute	HH head	0.013 (0.028)	-0.137 ^{***} (0.035)	-0.036 (0.078)	-0.103 [*] (0.060)	-0.042 [*] (0.022)	-0.001 (0.018)	-0.002 (0.026)	-0.028 ^{***} (0.008)	0.007 (0.012)	-0.160 ^{***} (0.061)
	Spouse	-0.043 (0.029)	0.001 (0.018)	0.059 (0.063)	-0.125 [*] (0.073)	-0.034 (0.022)	0.012 (0.016)	-0.127 ^{***} (0.028)	-0.025 ^{***} (0.008)	-0.019 (0.012)	0.021 (0.042)
Chronic	HH head	0.001 (0.022)	-0.029 ^{***} (0.010)	-0.022 [*] (0.012)	-0.010 (0.041)	-0.049 (0.040)	-0.005 (0.033)	-0.007 (0.018)	-0.003 (0.013)	-0.020 (0.022)	-0.016 (0.016)
	Spouse	-0.037 [*] (0.021)	0.010 (0.010)	0.007 (0.012)	-0.104 ^{**} (0.043)	-0.032 [*] (0.019)	0.022 (0.029)	-0.053 ^{***} (0.018)	0.001 (0.014)	-0.026 ^{**} (0.011)	-0.080 ^{***} (0.016)
		Bank deposits									
Poor	HH head	-0.004 (0.006)	-0.013 (0.008)	0.021 (0.018)	-0.012 (0.015)	0.009 [*] (0.005)	0.000 (0.003)	0.027 ^{***} (0.006)	-0.003 (0.014)	0.028 ^{**} (0.013)	-0.030 (0.034)
	Spouse	0.022 ^{***} (0.006)	0.008 (0.006)	0.018 ^{**} (0.008)	0.026 ^{***} (0.006)	0.013 ^{**} (0.005)	0.002 (0.003)	0.002 (0.005)	-0.005 (0.014)	0.006 (0.007)	0.006 (0.013)
Acute	HH head	-0.036 (0.038)	-0.001 (0.004)	-0.023 ^{***} (0.007)	-0.062 ^{***} (0.010)	-0.012 [*] (0.007)	0.000 (0.004)	-0.028 [*] (0.017)	-0.026 ^{***} (0.004)	-0.028 ^{***} (0.006)	-0.007 (0.029)
	Spouse	-0.185 ^{***} (0.035)	-0.006 (0.005)	-0.021 ^{***} (0.008)	0.014 (0.026)	0.002 (0.007)	0.006 (0.004)	0.016 (0.020)	-0.010 ^{**} (0.004)	-0.017 ^{***} (0.006)	-0.041 ^{**} (0.018)
Chronic	HH head	0.021 ^{***} (0.006)	0.004 (0.003)	0.017 (0.019)	0.010 ^{***} (0.004)	0.023 ^{***} (0.005)	-0.002 (0.003)	0.002 (0.005)	-0.003 (0.010)	0.006 (0.013)	0.005 (0.007)
	Spouse	0.024 ^{***} (0.006)	-0.003 (0.003)	0.019 (0.015)	0.003 (0.004)	0.021 ^{***} (0.005)	0.001 (0.003)	0.005 (0.005)	0.028 ^{***} (0.010)	-0.004 (0.007)	0.014 ^{**} (0.007)

Note 1. Dependent variables are the share of net wealth invested in risky financial asset in the top panel, the share invested in savings for long-term investment in the second panel, the share invested in principal residence in the third panel, the share invested in non-financial asset in the fourth panel, and the share invested in bank deposits in the bottom panel. For each asset category, three different health measures are used. This table reports a total of 150 pairs of coefficients for health condition of household head and spouse from 15 separate specifications

for each of 10 participating countries. All the models include control variables listed in the data section. Robust standard errors are in parenthesis.

Note 2. “***” indicates that the estimate is statistically significant at the 1 percent significance level, “**” at the 5 percent significance level, and “*” at the 10 percent significance level.

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The Relationship between Firm Sizes and Stock Returns of Service Sector in Ho Chi Minh City Stock Exchange

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Abstract

The paper aims at investigating the existence of size effect in Vietnamese financial market. Particularly, the relationship between firm size and stock turns would be explored. Having 160 observations of the companies in service sector from 2009 to 2014, the multiple regression model was employed to test that effect. As a result, a significantly negative relationship between firm size and stock returns was studied. Besides, some implications and limitations were also discussed.

Keywords: firm sizes, stock returns, service sector, Ho Chi Minh stock exchange, Vietnam

1. Introduction

Although there are a numerous studies related to size effect phenomena, it's still in debate of the existence of size effect in financial markets. Size effect is studied as an inverse relationship between two variables, size and returns of companies that so-called the size anomaly (Banz, 1981; Fama & French, 1993; Daniel & Titman, 1997). While several assumption and modification were made, Banz (1981) indicated that the negative relationship has been reinforced throughout the time by practically observing 50-year performance of the New York Stock Exchange. However, Keim (1983) proved that the size effect only appears in January (i.e., seasonal effect). Arguably, most updated researches showed totally different findings. Fama and French (2011) observed the market for 20 years from 1990 and explored no premium for the size effect. That exploration was also supported by Dimson and Marsh (1999) which stated that returns for small firms do not exist for a long time horizon. Overall, presence of size effect has not yet reached the final conclusion.

Another point worth discussing for the research motivation is a restriction in the applicability of the size effect. Nobody has unveil what are the underlying factors of company sizes affected the returns. The size anomaly is not a widely applicable theory which can be implemented in all markets. Thus, it appears necessary to study the size effect (i.e., the relationship between firm size and firm's returns) in Vietnamese financial market, particularly Ho Chi Minh stock exchange, which is quite young and don't get much attention from researchers.

In fact, it has still questioned the possibility for the size effect to appear in Vietnam than the US stock market. When comparing between Vietnam and the US, Vietnamese securities market is very youthful and microscopic. More importantly, a large gap exists between the efficiency levels of two markets. If in the US, the size effect is just a small violation of a strong-form efficient market. After 1981, this violation tended to disappear that reinforce the attribute of a strong efficiency market where people cannot exploit mispriced stocks to earn superior returns. On the other hand, weak-form efficiency does not hold in Vietnam which means mispriced securities are available. Hence, an anomaly of size and returns is highly possible in this market. It sounds to empirically test the existence of size effect in such an emerging market as Vietnam.

The study aims at providing fresh insights relating to size effect in Vietnamese financial markets for both managers and investors. For manager perspective, the paper could be a reference to examine the current business conditions for business plan of growth. For investor perspective, the understanding of size effect could help them classify securities regarding their accompanying risks for different risk tolerance levels or even beat the market. What is more, it also enriches practice-related experience of size effect in such an emerging market as Vietnam. It supports to complete the understanding of size effect theories in different institutional contexts.

2. Literature Review and Hypothesis Development

2.1 Prosperity of Size Effect

There are three main theories known as the foundation of the relationship between size and returns. First, it is the Capital Asset Pricing Model (CAPM). Sharpe (1964), Lintner (1965) and Mossin (1966) attempt to prove the hypothesis that high risk can lead to high return of stock. CAPM takes risk free rate and market risk premium as representatives of risk factors. Theoretically, risk free rate is defined as the return on a risk-free-asset which investors can earn with certainty, while the risk premium is additional compensation for the stockholders which expose to higher risk in comparison to investing in risk free assets (Sharpe, 1964). The company size contributes partially to the risk premium as big companies are safer for investment (Mossin, 1966). However, several assumptions have been made in this theory (e.g., every investor will include risk free and risky assets in their portfolio; costs of lending and borrowing are risk-free rates; all investors hold their stocks for an identical horizon; there is no tax and no transaction costs and investors are risk avoidant in their nature with a desire to maximize returns with their capital investments) (Sharpe, 1964). The risk premium is affected by beta—the extent of risk of a stock when comparing the market risk. The theory is then written down as a formula:

$$R_e = R_f + (R_m - R_f) * \beta$$

Where:

R_e : Required rate of return on a stock

R_f : Risk free rate

R_m : Market return

$(R_m - R_f)$: Market risk premium

β : Beta

Similarly to Capital Asset Pricing Model, Fama and French three-factor model also strived to define securities returns. While Capital Asset Pricing Model solely focuses on the risk factor, Fama and French (1993) specified other two factors to their three-factor model such as the size and books-to-market ratio into their consideration. The stimulus for their research is the observation that small capitalization stocks and low book-to-market stocks actually brings higher return than other stocks in the market.

The final theory which is related to the linkage between size and return is the Efficiency Market Hypothesis (EMH). Fama (1970) stated that prices of stocks will fully reflect their inherent information when the market is efficient. To determine whether the market is efficient or not, it provides several assumptions. All investors' analysis of the stock market to choose securities for investment; all information coming to the market independently and voluntarily; all securities reacting quickly to new information and the reflection of all information in securities' prices are four main assumptions in this theory.

Empirically, returns of small companies surpassed returns of large companies in the first period, from the beginning of 1960s to the ending of 1980s in the US market. The most well-known empirical research about size and return in this stage belongs to Banz (1981) observing companies on New York Stock Exchange (NYSE) during 50 years from 1936 to 1975 and the companies must be existed on the exchange for at least five years during the period. Return was calculated by CAPM theory which is a function of beta and some other factors. Market value of equity represented for the size factor of studied companies. The model can be expressed in the formula below:

$$E(R_i) = \gamma_0 + \gamma_1 \beta_i + \gamma_2 [(\phi_i - \phi_m) / \phi_m]$$

Where:

$E(R_i)$: Expected return on security i

γ_0 : expected return on a zero-beta portfolio

γ_1 : expected market risk premium

γ_2 : constant measuring the contribution of ϕ to the expected return of a security

ϕ_i : market value of security i

ϕ_m : average market value

The analyzing process began with grouping observed firms into different portfolios (Banz, 1981). First, it grouped them into only five portfolios depending on their sizes. Then, it grouped once again based on their beta

and came up with twenty five portfolios. Afterwards, Ordinary Least Squares regression (OLS) and Generalized Least Square regression (GLS) were performed to generate the final result (Banz, 1981). In reality, either of the OLS or GLS is acceptable, Banz (1981) had strived different manners to minimize the possible errors. The result turned out that from 1936 to 1975, the common stocks of small firms had higher returns than the ones of big companies. However, this result contains several limitations. The first limitation is the market capitalization and the returns do not share a linear relationship. This means low market capitalization does not always lead to higher return, so there is a certain level of possibility for the inverse cases to happen. Besides, not providing any theories which directly explains the phenomenon is the second limitation of the research. Thus, the outcome of the research was also unable to identify whether the size is truly a factor impacting on the return or it is just a proxy for some other hidden factors. However, Banz (1981) had put a strong evidence for the existence of the size effect.

Besides, Keim (1983) conducted another research which is also about the subject of companies' size and return in 1982. The analyzed sample contained firms which were listed on either NYSE in the period from 1963 to 1979. The findings supported the hypothesis of Banz (1981) in terms of the existence of negative relationship between the sizes of firms and their returns on the market.

Although Banz (1981) is considered as an initiator and a pioneer in size and returns practice, the research seems to be the most skeptical one in the eyes of other researchers and competitors. The main reason belongs to the fact that no theory was provided in his study. The study of Berk (1995) could be recognized as another backing for Banz (1981). Berk (1995) stated that "we certainly cannot rule out the possibility of such a relation". Moreover, the researcher clearly differentiated between a proxy of risk and a source of risk. The conclusion of the study is that size is actually a proxy for risk. This means there are some types of risk which underly the size factor to bring superior returns for small firms.

2.2 Disappearance of Size Effect

The size and return relationship has disappeared from the beginning of 1980s. In this period, the correlation of those variables turned out to be blurring not only in the US market but also the UK market. Horowitz (2000) marked the disintegration of the size effect in the US market. The sample size of Horowitz (2000) consists of listed US firms from 1980 to 1996 which is right after the tested period of Banz (1981). For validating the results, Horowitz (2000) examined the sample in three distinctive manners. At the initiating, the paper retrieved from the observation for performance in terms of annual returns between the groups of smallest size decile and largest size decile. The group of larger firms defeated the group of smaller ones. This illustrates the first idea of the disappearance of the size effect. For second manner, Horowitz (2000) utilized the method from the study of Fama and French (1993). The outcome pointed out that firms' size is not a significant element in defining the returns. For the third test, the paper performed the linear spline regression model to reexamine the data. Once again, the result proves that size and return did not hold in this horizon. Additionally, Amihud (2002) also performed a similar study by using regression analysis from 1964 to 1997. It found that the size affected returns strongly from 1964 to 1980. In contrast, size was not important in explaining returns from 1980 to 1997 in the statistical perspective.

Similar phenomenon took place in the UK market for size and return relationship during comparable period. Dimson and Marsh (1999) did an outstanding research for this market from 1955 to 1998. They did not only identify which size generates more returns but also offered a specific number for illustrating the threshold which small size companies outperform the larger ones. Explicitly, from 1955 to 1986, small companies provided investors average 6.2% higher profits than the larger companies. On the other hands, 6.5% is the portion of returns that bigger firms brought to investors higher than smaller companies from 1986 to 1998. In the UK market, the turning point of an existence of that relation between size and returns tended to be different. While in the US market, the bigger companies started outperforming smaller ones from 1980 or 1981, the turning point in the UK market started from 1985 to 1986. Although UK market lagged behind US market for a couple of years, the symptom of two markets are identical.

However, the size effect did not disappear completely. Moore (2000) conducted a research of 1500 companies which were taken from "1999 Value Line Investment Survey" for the period from 1989 to 1998. This study did not use market capitalization to measure companies' sizes as other studies. Instead, the study employed total assets, net income, earnings per share ratio, price-earnings ratio and beta to measure the magnitude of the size variable. The size effect holds for the findings of this study. Thus, size effect may still exist with different measurements of company size.

More importantly, a more detail cycle of appearance has been discovered. There are at least three studies found that size effect happened mostly on January which is called the January effect or seasonality attribute of size effect. The oldest study was Rozeff and Kinny (1976) which detected that smaller companies could generate 3.48% higher returns on January while only 0.42% higher in other months. The next study is Keim (1983). It examined whether the linkage between size and return happens continuously or at specific time. However, it also realized that the actual abnormal return relative to firms' sizes only appears at a specific time within a year. In specific, the author found that from 1963 to 1979, 50% of the abnormal return related to size factor appeared in January. Moreover, over fifty percent of the January abnormal return only occurred on the first trading week of the year. The outcomes had proved the presence of seasonality factor on the size effect. In spite of the empirical result was clear, the implicit causes of seasonality feature on size effect were still not be uncovered by the paper. In the same year, two more studies of Reinganum (1983) and Roll (1983) verified the subjection of January attribute to the size effect for smaller market capitalization enterprises. Besides, Easterday, Sen and Stephan (2009) established a research for nearly 62 years from 1946 to 2007. The January effect still existing during that long horizontal was the final finding. Until this point, size effect is strongly attributable to seasonality properties. Therefore, the size effect may not disappear completely. It is shifting to other form, such as the January effect, which is harder to detect. This happens due to the changes of market conditions.

2.3 Hypothesis Development

The hypothesis of this study bases on the fundamentals of Capital Asset Pricing Model and Fama and French three-factor model. Small companies are basically riskier than big companies. For granted, some types of risk associated with small businesses can be thought of difficulty to approach financing sources, lower market share or less reputable brand names. According to CAPM, small companies will get higher returns. Investments in these companies can be considered to be at the highest level of risks and are deserved to earn higher returns. However, there is an assumption which need to be made in this study. The risk levels of firms also depend on the risks of the industry as well as the projects that the companies are undertaking. Hence, big companies can also bear higher risk if they are in a risky industry. The assumption is that this study will neglect factors which make big companies to be riskier than smaller companies. With the assumption, CAPM can successfully support the hypothesis of small firms can bring higher profits where high risks investments should be compensated with higher returns. To provide an even stronger evidence, Fama and French three-factor model is employed. This theory draws a clearer picture which take firms' size into explaining the returns. Since CAPM only uses risks factors and smaller firms are implied to have more risks, the relationship of size to returns is reinforced through three-factor model. Thus, it sounds to propose that:

Hypothesis: "Firm size has a negative relationship with return".

3. Methodology

3.1 Estimation Model

The paper employed multiple regression model to test its hypothesis (Jaccard et al., 1990; Aiken & West, 1991; Moore, 2000). First, all control variables would be entered into Step 1 of the model. Second, the independent variable, Total Assets, was input into Step 2. Although this study only focused on the impact of total asset on the firm performance variable, it's necessary to examine this relationship under a set of some control variables (e.g., Earnings-Per-Share, Price-Earnings ratio, Net income and Beta). It is studied that those control variables vary that relationship for a certain extent (Al-Khazali, Osamah, & Zoubi, 2011). Besides, the underlying assumption of multiple regression, outlier, was thoroughly checked to enhance the validity of the research findings (Aiken & West, 1991). By examining the beta-coefficient of Total Assets variable, its significance, as well as the change in the adjusted R-squared attributed from its existence, the relationship between firm size and firm return would be confirmed (Jaccard et al., 1990).

3.2 Variable Measurements

Dependent variable—stock return would be calculated by dividing the sum of stock price and dividend payment by previous stock price to achieve stock return in percentage.

Independent variable—there are various indicators to measure firm size: Total Assets (Hopkins, 1988), market capitalization (Al-Khazali, Osamah, & Zoubi, 2011), etc. However, Moore (2000) referred total assets rather than market capitalization to avoid inflation or deflation of securities. This assumption is appropriate for the context of Vietnamese market due to its inefficiency in which stock prices do not reflect all accompanying information. Thus, stock prices may be volatile due to informal reasons. It appears sensible to employ Total Assets as an independent variable for this study.

Control variable—some control variables were utilized in this study in order to test the relationship between Total Assets and Stock Returns under a thorough consideration of all interaction among indicators affecting on stock returns. They are Net Income (Basu, 1977; Ball, 1978; Reinganum, 1981), Earnings-Per-Share (i.e., Net income divided by total shares outstanding), Price-Earnings ratio (i.e., stock price divided by EPS) (Ball, 1978), Risk measured by beta (i.e., coefficient of regression equation between stock return and market return) (Litzenberger & Rasmuswamy, 1979; Miller & Scholes, 1982).

3.3 Data

Both Ho Chi Minh Stock Exchange (HOSE) and Ha Noi stock exchange (HNX) are the official ones in Vietnam. However, HOSE has higher standards for listing and market capitalization. Thus, HOSE could be seen as a driver for the whole Vietnamese financial market. Besides, service sector has mostly contributed to GDP of Vietnam in recent years, which accounted for 44% of GDP in 2014. As a result, the research sample of all firms in service sector that have been currently listed in HOSE would be employed.

Obviously, there was a crisis from 2007 to 2008 which made all financial data significantly change. To minimize the effect of the crisis in this study, the panel data from 2009 to 2014 would be adapted. In addition, to ensure the sense of validity and reliability of the study, the financial information (e.g., total assets, net income, total shares outstanding, dividend payments) would be extracted from the audited financial statements of the sampled companies from 2009-2014. Those financial statements could be achieved from the companies' websites. Besides, the respective stock prices and market returns were collected from the official website of HOSE. After satisfying all requirements, outliers of the data would be eliminated by using Cook's Distance and scatterplot. The remaining observations were 160. According to Tabachnick and Fidell (2007), the appropriate sample size should be larger than $50+8M$, which M stands for numbers of independent variable. Hence, the research sample confirmed on its generalization (Table 1).

Table 1. Sample outcomes

Industry	Total Companies	Number of selected companies (Satisfying analyzing conditions)
SERVICE SECTOR		
Wholesale and retail trade; repair of motor vehicles and motorcycles	45	18
Transportation and storage	25	7
Accommodation and Food service activities	3	0
Financial, banking and insurance activities	19	3
Real estate activities	38	5
Total		33*
Conditions:		
<ul style="list-style-type: none"> • Companies have been listed for at least 6 years from 2009 to 2014 • Financial statements need to be audited 		
Note:		
<ul style="list-style-type: none"> • *This number does not exclude the outliers and missing value observations • Industry is classified according to the classification of HOSE 		

4. Results and Discussion

4.1 Research Findings

To ensure the senses of validity, reliability and generalization of the research findings, three main assumptions of multiple regression model (i.e., outliers, sample size and multicollinearity) need to be satisfied. For outliers, by employing scatterplot and Cook's Distance, the observations whose standardized residuals are less than -3.3 or more than 3.3 would be removed from the sample. Consequently, 160 observations for each variable were

remained that could be effectively projected the findings for whole population. Last, the correlations among independent variables were less than 0.8, so no existence of multicollinearity problem was confirmed (Table 2).

Table 2. Correlations

		Returns	TA	NI	EPS	P/E	Beta
Pearson Correlation	Returns	1.000					
	TA	-.114	1.000				
	NI	.157	.537	1.000			
	EPS	.254	-.070	.307	1.000		
	P/E	.080	.011	.190	.651	1.000	
	Beta	-.011	.479	.343	-.051	.069	1.000
Sig. (1-tailed)	Returns	.					
	TA	.076	.				
	NI	.024	.000	.			
	EPS	.001	.190	.000	.		
	P/E	.156	.445	.008	.000	.	
	Beta	.447	.000	.000	.263	.192	.

For descriptive statistics, as shown in Table 3, the independent variable, nature logarithms of Total Assets, varied from 26.08 to 29.87 with a mean of 27.81. Otherwise, the range of stock returns variable fluctuated from the loss of 70% up to the gain of 201%. It also presents the average returns for listed companies in service sector in HOSE from 2009 to 2014 was 25.78%.

Table 3. Descriptive statistics

	Return	Total Assets	Net income	EPS	P/E	Beta
Mean	.2578	27.8091	79.9584	2358.37	.1216	1.0235
Std. Deviation	.58708	1.00418	137.30741	2714.120	.26541	.32648
Variance	.345	1.008	18853.325	7366445.958	.070	.107
Minimum	-.70	26.08	-304.54	-6980	-1.80	.04
Maximum	2.01	29.87	804.08	15101	1.40	1.78

Following the input of control variables, the presence of Total Asset increased the adjusted R-squared from 6% to 8.5% with significant value ($p=0.023<0.05$) (Table 4). In other words, Total Assets could be a statistically significant predictor to explain 2.5% fluctuation of Stock Returns. Besides, the goodness of fit indicator with F value of 3.959 ($p<0.05$) strongly confirmed that the explored statistical model would well fit to the set of observation, the relationship between firm size and stock return (Table 5). Last, as shown in Table 6, the unstandardized coefficient Beta of -0.134 with p value of 0.023 (i.e., less than 0.05) supported to accept the proposed hypothesis in a fashion of high confidence that stated the negative relationship between firm size and stock returns in Vietnamese market, especially in service sector.

Table 4. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.289 ^a	.084	.060	.56919	.084	3.538	4	155	.009
2	.337 ^b	.114	.085	.56154	.030	5.254	1	154	.023

a. Predictors: (Constant), Beta, EPS, NI, P/E

b. Predictors: (Constant), Beta, EPS, NI, P/E, Total Assets

c. Dependent Variable: Returns

Table 5. ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.584	4	1.146	3.538	.009 ^a
	Residual	50.217	155	.324		
	Total	54.801	159			
2	Regression	6.241	5	1.248	3.959	.002 ^b
	Residual	48.560	154	.315		
	Total	54.801	159			

a. Predictors: (Constant), Beta, EPS, NI, P/E

b. Predictors: (Constant), Beta, EPS, NI, P/E, Total Assets

c. Dependent Variable: Returns

Table 6. Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.133	.164		.810	.419		
	NI	.000	.000	.092	1.051	.295	.773	1.293
	EPS	6.867E-5	.000	.317	2.958	.004	.513	1.948
	P/E	-.315	.227	-.143	-1.392	.166	.563	1.775
	Beta	-.029	.151	-.016	-.193	.847	.836	1.196
2	(Constant)	3.730	1.578		2.364	.019		
	NI	.001	.000	.207	2.076	.040	.577	1.734
	EPS	5.650E-5	.000	.261	2.403	.017	.487	2.053
	P/E	-.288	.224	-.130	-1.285	.201	.562	1.781
	Beta	.091	.158	.050	.573	.567	.745	1.342
	TA	-.134	.059	-.230	-2.292	.023	.573	1.744

4.2 Discussion

The research's finding is strongly supported by the argument of Berk (1995) which states the risky level of small firms is higher than big ones. Following the underlying understanding of CAPM model, the higher level of risk probably generates higher level of returns. Besides, this argument also appears persuasive by the study of Vanden (2015). In emerging markets, particularly the weak form of market efficiency, the noisy information significantly gets embedded in stock prices. For small enterprises in Vietnam, the availability of related information is quite rare and unreliable (Suret, Morrill, & Morrill, 1998), so stock value could be understated or overstated. At the same time, the insider trading problem may occur that can mislead the supply and demand in the market. It results in generating higher expected returns in comparison to its actual value. Otherwise, the big corporations tend to highly commit to the finance-related regulation from the government (Vanden, 2015). They always publish their financial information as required and their related information could be easily accessed via publish information channels. Comparing big and small firms in that discussion, it can be appreciated that the small ones would have higher probability to bear higher return.

5. Conclusion

The size effect in Vietnamese market was confirmed by statistical tests during the period 2009-2014 of service sector. The firm sizes and returns negatively related. In other words, smaller companies can actually bring investors higher returns in both dividends and capital gain. This may be due to higher risks which smaller companies have to expose to or Vietnamese market does not reach a strong-form efficient to avoid the usage of public information for defeating the market. The outcome of this study is supported by Banz (1981), Moore (2000) and Berk (2015).

There are two implications which are beneficial for managers and investors. First, the paper could be a good reference to examine the current business conditions for business plan of growing. Second, investors can earning a premium for less analysis. As the analysis is a big constrain for new investors, this study can help them to have some evidences in electing their first stocks portfolios. Moreover, for investors who are risk takers, this should be a good evidence for them to filter high risk stocks in Vietnamese financial market. Third, this study also validates the applicability of well-established theories in Finance, CAPM and EMH, into emerging market as Vietnam.

The paper also figures out some limitations worth discussing in future researches. It does not intent to explain the underlying factors of the size effect, so it appears necessary to deeply investigate the underlying factors of firm size that could be varied across industries and markets. Besides, the control variables should be separately and thoroughly examined by other researches to study their interaction and effect on stock returns. Last, this research did not conduct a yearly basic analysis. This study which employed longitudinal approach analyzed the data from 2009 to 2014. However, the size effect possibly appears in one year and disappears in other years. Thus, analysis should be conducted for each year rather than a period in order to even explore the seasonal size effect as discussed.

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The Importance of Art-Based Curriculum in Peace Education

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Abstract

The present study aimed to draw attentions toward the importance of art-based curriculum in peace education. Arts education can nurture humanitarian and peaceable children. However, arts education and its effect on developing ethical skills, compassion, sympathy and peace have been neglected in many societies. In this research, by analytical-descriptive method, the interaction between arts education and peace education has been explained. The main finding of this research is that Arts education through various methods including visual arts, performing arts, cinema, and music provides different methods for revolutionizing the mind. Therefore, the role of content mediation of art for understandability of the truth about peace could not be neglected. Art as content becomes the mediator for understanding and nurturing peace.

Keywords: art, peace, arts education, peace education, curriculum

1. Introduction

Since the beginning of human creation, humans have always tried to make their surroundings beautiful. This effort has been soothing as well as pleasant for them. Later, this human desire has been called “art”. According to many scholars, finding a comprehensive definition for art isn’t an easy task. Tolstoy said that Art is the arena for human activities and includes deliberate attempts to use certain outward and emotional signs to transmit their experiences to others (Tolstoy, 1985, p. 55). Art represents characteristics of a society that depicts differences and changes in cultures and civilizations. Art is the outcome of human thought system and their creative skills of illustration, therefore, art is a representative of the society in which it is formed (Abaci, 2013, p. 691).

The great importance of Art in human life drew the attention of educational systems. But in a long time, art couldn’t enter to the core of education. In order to move the art from margins to the center of education, huge efforts have been needed. In the case of this target, educational systems may enjoy the advantages of art curriculums. Robinson (2000) investigated three basic issues to consolidate the position of art in a knowledge-oriented society: The first of which is the “curriculum”. Needless to say that no one can state for sure that mathematics is more important than music and science plays a more significant role compared to arts and human sciences. Thus, they are all equally important. The second issue was to teach “educators”. Arts education is a highly professional skill and is not an easy task to accomplish. In case arts are to be enjoyed, learners have to immerse themselves in them. The final issue is the “cooperation”. Schools must not ever be managed exclusively by the state educational system. Countless cultural and art organizations are interested in cooperation with the educational system and promotion of artistic trainings (Kian & Mehr-Mohammadi, 2013, p. 122). Another important point emphasizing the importance of using art as an intermediary for nurturing peace is that art can contribute to promoting peace-oriented thoughts; The intermediary that covers and goes beyond an artistic arena and concerns itself with the nature of art and aesthetics in all fields. Thus, arts curriculum for the sake of promoting peace is both the base and the intermediary. It covers both the educational method and content aiming to teach aesthetic and humanistic senses to the learners and improve their emotional intelligence. In other words, art is a key to promoting peace in young learners and can facilitate this promotion through emotional and communicative tools, methods and contents.

2. Review of the Related Literature

In their analysis of experiences of female teachers arts education in primary schools, Zolfagharian and Kian (2014) qualitatively demonstrated that teachers believe that arts education plays an important role in recognizing internal and mental problems in children and discovering their special talents. Teachers did their best and tried to make up for the lack of funding and facilities by providing them with their needs. Art for the unapt and hyperactive children is also of great benefits. It can increase the speed of emotional skills, training creativity and social participation and help them gain a better understanding of traditions and Islamic and ethnic cultures. Constant investigation of the teachers' guidebook for the arts curriculum and evaluation of their teachers' performance along with getting their feedbacks and utilizing them in updating the content of those books could have significant effects.

In another study by Navab (2014), the relationship between art and moral education was logically elaborated and two main understandings were extracted. Murdoch outlines the first one and believes that art can remove all evil and replace them with merits for imagination gives the power to see and attend the truth and as a result, illusion as the source of evil is eliminated. This ends in a moral life for the human. The second understanding states that art is mixed with imagination, therefore, it discovers the truth and this discovery is by nature a merit and ends in moral life.

Sodagar et al. (2011) demonstrated that the plan to teach philosophical thinking to children is a plan intending to improve thinking skills in children. The pioneers of this plan used literature as the most suitable tool for communicating for children for its hidden functions and properties. However, novel alternatives have been introduced as well. The point here is that art as a substitute including literature is aided by various modern tools with internal content and has the potential to respond the fundamental, theoretical and practical position of art in thinking. Their paper considers art as a tool for attaining wisdom or thought and explains how this intermediary role in teaching philosophical thinking to children necessitates a theoretical approach and as a result aims to cultivate art and philosophical thinking as an integral obligation.

On the other hand, Saberi and Mahram (2011) showed that one of the major responsibilities of public education is to flourish artistic capacities in its learners. Art production, art criticism, aesthetics and the history of art as indices of arts education, music, drama and visual arts as the content structure of art books at schools and educational planners have to consider them in their plans to realize potentials in humans. In their paper conducted through content analysis, all the art books in the secondary school levels of Iran published in the school year 2008-2009 were selected as the corpus of the study. The recording unit was given to the text, image and the exercise. The coding was inductive and was done based on subjective and structural categories. The coding was validated by asking a second evaluator to code 10% of the content which led to 86% agreement. Their results revealed that aesthetics along with the history of art in Iran and Islam were respectively of the highest dimensions of arts education, painting, calligraphy and graphic and held the first to third ranks in the priorities of art books in the educational grades under study. Results also revealed that important aspects of art like music, drama, the history of world art and art criticism are the most neglected ones.

Marshall, Laurie (2014) in an article titled "Art as Peace Building" shows that Art educators can "critique" senseless violence-mistreatment, exclusion, intimidation, bullying, violation, abuse, corruption, murder, and war by unleashing the power of students' creativity. In this article, the author, sharing her philosophical context, discusses how art is preventative medicine with the power to transform the cycle of violence. She focuses on three realms: (1) Art healing the effects of violence on the individual; (2) Art unifying divisions within a school; and (3) Art for building peace in a greater community. The practice of art actually rewires the brain to move from "difference as danger" to "difference as richness". As our world increases in complexity, the arts have an increasingly vital role to play to set the stage where peace is possible and violence is prevented.

Gültekin (2013) believes that peace education embraces a wide range of ideas ranging from creating a peace literature on which international community agrees to developing unique and innovative models for peace. Artistic productivity is one of the main topics for peace education. In this study titled "Communication Models and Sensitivity Approaches for Intercultural Peace Education", peace education through the concept of sensitivity and the strong emphasis of art on peace education will be structured. Also communication efforts in educating the society through peace will be annotated through models and unique public relation activities. Techniques of molding a public opinion on Peace Education, civil society and media's role on educating the society, reinforcing the education with initiatives by artists, international organizations and educational institutions captaincy for peace, peace literature education, emphasizing on democracy through peace education and a strong call for democracy to world public opinion are other important topics on this subject.

Another study by Orhuan Beykal (2009) demonstrated that achievements of each student obtained through various methods and combinations of them are equal opportunities for educational parameters. Direct reception method easily makes students tired and then they receive a lower level of knowledge. Visual art instructor can take an interactive approach toward students and nurture their humanistic and cooperative skills.

3. Research Methodology

The present study is a qualitative library research. It involves identifying and locating sources that provide factual information or personal/expert opinion on the research questions. This study aims to investigate the position of arts education in nurturing peace and philanthropist behavior through a multifaceted (description, analysis and documentation) and scientific approach. In this regard, the present study briefly reviews theoretical and philosophical principles of arts education and elaborates on the reasons for the importance of art and its humanistic position to discuss using art in peace-oriented curriculums. The authors have used domestic and foreign databases along with theoretical principles to investigate art and the position of arts education in nurturing peace.

4. Research Questions

- (1) What is the role of art in peace education?
- (2) What are the artistic teaching-learning techniques for nurturing peace?
- (3) How does art curriculum mediate in nurturing and institutionalizing peace?

5. Arts Education

Considering the content of art curriculum, artistic production of the process of a reaction to observations, ideas, emotions and experiences through creating art works with high levels of wisdom and professionalism, imaginary application of devices and various techniques and media is of huge diversity. Artworks are the products created via interventions between artists and their purposes, concepts, approaches, cultures and social traditions together with other materials and media they select for their works (Getty cited in Wilson, 2002).

It could then be concluded that arts education is beyond teaching skills, activities and special knowledge to learners. Therefore, art curriculums have to improve workshop potentials and train teachers so that they cultivate their skills through working with teachers of other subjects and artists in different educational contexts. Art curriculum has to encourage the growth of knowledge and skill in the following areas:

- One or more fields of art
- Interdisciplinary forms of art
- Methods of arts education
- Methods of interdisciplinary teaching inside and through arts
- Curriculum design
- Evaluation relative to artistic education
- Official (school-based) art training
- Unofficial (society-based) art training

Thus, even in regional and national levels, instructions and standards have to be compiled so that arts teachers prepare themselves through trainings they receive before accepting their responsibility (World Conference of Arts Education, 2016). In fact, an incorporative approach provides students with problem solving opportunities through learning to create art and improve their skills in establishing meaningful relationships with art. Interdisciplinary or incorporative curriculums gives insight to students and encourages them to combine novel relationships between distractions (the National Arts Education Association, 2002; cited in Banga Chohkar, 2010, p. 142). Arts education is essential for the learners who yearn to be a perfect human and nurture themselves intellectually. Eisner (1972, p. 184) outlines the importance of arts education as follows:

- Arts education is a cognitive and intellectual necessity increasing cooperation, learning and creativity and preparing the individual to gain the ability to express themselves and select the proper path to cultivate his inherent aptitudes.
- Arts education as an individual necessity mandating aesthetic, cognitive, moral and emotional growth.
- Arts education as an efficient and productive necessity nurturing individual values and inducing participation in the process of production and creation of art.

In order for arts education to realize its ideals, proper physical structure, competent educators and insightful learners seeking creation and flourishing are vital (Sahan, 2009, p. 986).

Wyse and Ferrari (2014), Aysel (2014), Sharafi and Slasabili (2014), Saberi et al. (2013), Kian and Mehr Mohammadi (2013) and Ghadami (2013) have all investigated innovations in arts curriculums of schools and universities and have proved the need for them.

6. The Need for Arts Education in Nurturing Peace

In a relatively comprehensive definition, peace is defined as a mental, social, political, moral and spiritual state demonstrated in individual, group and global levels of human life. The final outcome of these states is human transformation from being self-centered, selfish and aggressive with dual insider-outsider outlooks to a universal and knowledge oriented view toward fundamental unity of humans and the link between them and the whole life in its ultimate sense (Danish, p. 46).

Teaching peace is of such a vast range that can cover a child's aggression in school level, racial segregation in the national or international level and even global commitment to saving the planet. However, its basics vary from one community to another. Nevertheless, forms and contents of teaching peace coincide with the implicit and explicit understanding from background condition and the related affairs (Haulsrod & Sternberg, 2012, p. 14). In spite of the fact that teaching peace may have various purposes, each society has a special technique for educating peace and is of a rich source of topics and discussions. Based on the wide variety of challenges facing humans, several ways are proposed for reaching security. Thus, teaching peace includes different forms and issues. Different forms of violence need different techniques of teaching peace.

One of the ways through which peace could be realized, is using art. Psychologists and art critics believe that having an artistic life guarantees salvation in social and individual life of people. Therefore, art helps solve mental disorders and increases internal coordination. This will be facilitated if we understand ourselves. This promotes mutual compassion and understanding and removes humans' introversion toward their fellow counterparts. On the other hand, this cements the accepted social values and promotes ethics. According to several scholars, peace plays the reliving role historically played by religion (Shabani & Raki, n.d., p. 288).

Teaching peace and arts have several common purposes. They both aim to relieve stress, improve concentration, expand imagination and augment sympathy. Whenever words cease to work music begins. Whenever a fact, an incident or a human experience could not be expressed through verbal signs and philosophical, logical and scientific concepts, art begins. Art can do things that could not possibly be done with things that use verbal potentials of the language. It refers to human senses and when added to revelations, art demonstrates a high level of potential for transmitting inherent experiences of humans and reveals mysteries that could not ever be opened with any other keys. Art opens up routes for humans that could not be traversed with unstable feet of wisdom and logic. Artistic creation is of an elevated position in the spiritual life of humans and this gives it a higher position compared to science, logic and even philosophy (Ahmadi, 2013, pp. 1-2). The power of an image of a war-stricken kid is incomparable to hundreds of books and articles published to censure violence and praise peace.

Maxine Greene, in his book titled "releasing imagination: papers on education, art and social change" (1995), believes that imagination is the basis for educational and social reforms. Greene takes classes and societies into consideration that value multiple views, democratic pluralism, life stories and constant social changes. According to him, this could only be possible through artistic, literary and phenomenological experiences inducing the release of imagination. For him, arts education is a tool for stimulating learners' imagination, thinking in different ways, confronting others in an objective and in the form of a persona in a play or a novel and staying in a reality apart from real life conditions as a necessity for appreciating a work of art. Being inspired by descriptions of artistic interactions by John Dewey and other scholars, Greene introduces the formation of an artwork in the subconscious as a metaphor for the process of learning (Palmer, 2012, p. 213). Dewey on the other hand believes that art help us better understand others. Cordiality is not the outcome of the information we acquire about others, even though this information could be of some help to the continuation of these relationships. However, this could only happen if this information becomes an inseparable part of sympathy through imagination. Understanding others becomes feasible when interests, trends, desires and purposes of someone converge with one's own. We then learn to see through their eyes and hear through their ears and these are the outcomes of the real learning for they turn into parts of one's body. Teaching the art of life is beyond transmitting information about it. It is about communicating, sharing and participating in life values through imagination and artworks have the highest potential to help people share their art of life with others. Civilizations become crude as their individuals are divided into races, peoples, and groups with no

communication between and lose the power of understanding each other (Dewey, 2012, p. 394). Contemporary art increases our understanding from current affairs. In case a relationship is established between beneficent and educational information available in elementary school books and stories, concepts, concerns, awareness and messages of artworks, positive thematic approach learning will be reached. Then a society will be founded by teachers and learners who are not only supervising their environment, but also actively confronting problems and attempting to solve them. This approach toward thematic learning finally promotes cordial and encouraging relationships via creating social participation and real life experiences.

7. Philosophy of Arts Education

7.1 *The Position of Arts Education*

Since the time Plato condemned art as the source of stupidity under the name of truth and expelled artists from his utopia to the present time in which art classes are given to math teachers to make up for the lack of time, art and artists have been neglected. However, this forced or sometimes willing seclusion has had its influence as a miraculous contribution to evolution of moral and spiritual affairs. In the history of the philosophy of art, two distinct philosophical groups are identified. Some believe that art must serve art or "Art for the sake of art". Art has an inherent gem and the artists create art for the sake of their own inherent and artistic joy.

The reason behind this version of art is to separate this form of artistic expression from social life. Such a theory believes that artists are not comfortable in a world full of class gaps. In this world, any form of human activity is dominated by business and market economy. According to this view, an original work of art could not justify any other thing but itself. The theorists behind the concept of art for art sake are generally the ones who oppose self-alienation in any form.

The other group believes that art is in a very close relationship with social affairs. For them, art is a tool for social communications and the artist is connected to the surrounding environment through his artwork. This artist criticizes, praises and is socially influential. Unlike the theorists of the first group, these theorists of the second group believe that the relationship between artistic creation and outside reality is always accepted for art beyond this relationship is nothing but mere regretful imagination. The only factor guaranteeing success of an artist, is the level at which he convinces people to believe him, understand his work and show reactions. Therefore, an artist cannot evade social values (ibid., p. 3).

Creating art, the artist can try things that have been deprived of him in his real life. This is beyond dos and don'ts. However, what does this freedom represent: the unification of the real world with the ideal one. The point worth mentioning here is that no branch of wisdom or human sciences can produce such experience. Humans are constantly facing the world emerging in front of them and their internal world. According to Shilling, in art, we can go through this distance and this is not done via wisdom but through artistic revelations and originality (Ahmadi, 2013, p. 341). Thus, understanding the relationship between art and collective life is of critical importance for in these relationships between art and social life a mutual interaction occurs successfully. On the one hand, the process of mental activity based on social experience and the concept of individual creativity in aesthetic innovation occurs and on the other hand the ability to appreciate this innovation and creating a relationship through suggesting concepts that could unify collective experiences of different groups and even the whole society happens (Dorinho, n.d., p. 74).

Dorinho believed that a work of art not only stimulates humans' praising emotions and feelings, but also the signs this product of imagination gives us. Then, humans seek to participate in a potential society which is completely far-fetched. The world is constantly recreating and is always reviving. Human imagination plays an important role in these ever-lasting revolution (ibid., p. 7). In fact, art and social life are two distinctively apart concepts converging at some points. One is a creative spirituality and the other is the human civilization. This convergence helps to the understanding of an artistic experience inside a social experience (ibid., p. 4). Therefore, theorists of art as a social phenomenon consider it as an effective key for solving issues of the contemporary society.

Among all diverse cultures of the world, art has always sought spiritual and mental affairs and has opened up highways in these fields. Peace and seeking peace are two ways to seek the truth opened up by human art for the humankind. Thus, the concept of peace has always needed art for staying on the road to the truth. In fact, several techniques are utilized for teaching and promoting peace one of which is art. Various arts aim to transmit peace or violence in different ways. The fact that Plato sought censorship in poetry and music is a proof of social and political impacts of these arts (Dewey, 2012, pp. 84-284). Art may be a shelter to protect humans against calamities. Dante went through inferno. Homer related the story of the war of wars and Dostoyevsky outlined the darkness of human soul. Humans sought shelter in art and found it (Ahmadi, 2013, p. 502).

Therefore, according to Greene, art can be the fundament of social reforms (Greene, 1995). Besides, art is one of the most exquisite ways to realize the true meaning of human. Children could use art to form efficient and positive concepts about humans and use it as a substitute for violent images in the media (Saheb Ghalam, n.d., p. 123). Art plays a key role in supporting learning and has the power to improve life skills, critical thinking, communication and their peaceful cohabitation (Corent, 1991, p. 5). In spite of vast impacts art has on human life, its education has remained inside conservative frameworks. Thus, the present paper aims to investigate the position of art in teaching and promoting peace for children. In order to do so, three major research questions are asked:

- (1) What is the relationship between art and peace?
- (2) How does art contribute to developing the culture of peace in children?
- (3) What are the methods of teaching peace through art?

Accordingly, the paper gives a definition of art and aesthetics, and then goes on with practical suggestions on application of art and its distinctions. Later on, the relationship between art and peace is investigated. Finally, the method of teaching concepts related to peace to children is discussed.

7.2 *Aesthetics and Art*

One of the dialogues between Socrates and Hippias is about beauty. The last sentence Socrates says in this long conversation is “What is beautiful is difficult”. Plotinus said, “Goodness and beauty are one and the same”. According to Stendhal “Beauty is nothing other than the promise of happiness”.

Before the mid nineteenth century, several philosophers attempted to elaborate on and define the concept of beauty. However, no final and clear definition could be given on beauty. In its modern definitions, beauty creates joy and apart from any benefit is senseless, public and turns into an endless goal (Ahmadi, 2012, p. 18). Shilling believed that the highest action wisdom has is the aesthetic one. The truth and goodness are unavailable unless in beauty, needless to say that aesthetic action is the same artistic revelation for beauty is the unique concept introducing us to ourselves and is feed of and definition and determination (ibid., pp. 141-142).

Aesthetics in a broad sense includes humans’ verve and sense when they face beauty. Although the aesthetic theory is humans’ attempt to realize observations and senses in different artistic forms, it helps nurture humans with balanced and beautiful lives. In spite of the fact that aesthetic values are of a great position in arts courses, drama etc. they help cultivate the verve in common people as well (Gotec, n.d., p. 1).

The term art is usually differentiated from the term aesthetics. Aesthetics is a science talking about beauty of the nature and art. However, art and aesthetics are both one form of knowledge. Art is a form of knowledge referring to creation of the artwork and aesthetics is the appreciation of the beautiful (Khatami, 2008, pp. 11-12).

Art is part of the general concept of aesthetics and includes painting, calligraphy, architecture, performing arts, novels, poetry, music etc. The definition of art sometimes is so broad that covers the life style in the horizon of existence. When the “I” exists in the arena of existence, and existence keeps me in its arena, life of me will become poetic and artistic (ibid., p. 132).

In his book, “the birth of tragedy”, Nietzsche states that “art makes life possible and worth of living”. In response to those who considered art a degrading discussion for philosophers, he says, “I am sure that art is the topmost signification”. He advised the world to be like a work of art that commences itself. The relationship between art and life had always been on Nietzsche’s mind (Ahmadi, 2013, p. 81).

What we have taken as art should have the following characteristics:

- (1) Art is a tangible product to be seen or heard. It could be either a material object like a book, sculpture or a CD or a performance like a play, a ballet or a concert. It could even be the finding of an individual.
- (2) Art is of a communicative nature. Art as a cultural product is not merely an existence and has to have been seen, heard, touched or experienced. Thus, art is a communicative action. Whether the artist believes in this relationship or not and whether the artist wants it or not, art has a communicative function and could be demonstrated through a schematic plan.

Artist ----- Artwork ----- Audience

- (3) Art is experienced for joy. This joy could be of different types. In order to have an aesthetic, recreational, interactive and mind-stimulating joy or even freedom, art could be utilized.
- (4) Art is an expressive form. When it is linked to the real life, an interpretation or a story could be created.

(5) Art is defined based on its background or its social or material context (Alexander, 2003, p. 3).

8. Arts Education and Peace Curriculum

Arts education has a significant effect on nurturing peace and philanthropist teachings in learners and especially at their early ages due to its human-oriented nature. Therefore, the most important elaborating factors of the relationship between arts curriculums and nurturing peace are listed as follows.

8.1 Human-Oriented Nature of Arts Curriculums

Education is basically an ethical affair and peace is an ethical value. Thus, the relationship between art, education and ethics should be elaborated on. Several discussions have been made on the relationship between ethics and art. Moralism in its most radical form limits the evaluation of an artwork to ethical criteria. Tolstoy is among these philosophers. He believes that “art has to stimulate brotherhood and philanthropist beliefs so that they become human instincts”. For him, Christian art is the realization of brotherly unity of the human kind. Therefore, an art propagating segregation and separation in a society instead of unity and goodwill or turns into a joy for the few intellectuals of the society are not considered as good art (Bermodus, 2008, p. 13).

However, there is another group who separate art from moral affair and consider no relationship between these two phenomena. They even believe that many of the greatest works of art are not moral.

Another important approach taken by this paper is considering moral characteristics of a work of art. In this regard, an artwork is moral to the point that its artistic and aesthetic experience is negatively or positively effective (Kiran, 2001, p. 33). When moral characteristics of an artwork are aesthetically connected to it, the moral fault necessarily brings an aesthetic fault and moral good brings aesthetic good. Brisgut (1998, p. 281) expresses the moral position clearly as follows: “in case unpleasant moral traits are demonstrated, the aesthetic side will be faulty as well. In contrast, an artwork representing moral virtues will demonstrate an aesthetic beauty”.

According to what was said before, the works of art with moral faults may sometimes be good or even masterpieces, yet, their faulty moralities will affect their aesthetic beauty. Thus, even though judging an artwork is not permissible merely through its morality, its close connection with the good and salvation of humankind will justify that judgment (Kumara, 2010, p. 5).

Therefore, for three simple reasons, our approach in this paper toward works of art is of moral nature. Firstly, our focus on education will be in its general sense and contradicts the immoral affairs. Secondly, our focus is on peace as an ideal and moral virtue with great value in social and individual life of humans. Thirdly, in our approach, art serves education and since children cannot make moral judgments and are not able to conduct critical thinking, not every type of art could be used in education.

8.2 Peace-Oriented Properties Governing Arts Classes

Learning is a social process. Beside family, schools are the earliest places in which children communicate with people. As an important part of their social life, children learn to react people with different ideas and make changes in themselves. Children learn to practice and adopt with diversity in their arts classes. One important issue worth being discussed in these classes is teaching peace.

Kaine and Caine emphasize on the necessity of students’ access to “rational perception and crating the meaning imagined”. Students share their life experiences through educational system. They discover problems, raise real questions and discuss their cooperation with others to create a world based on justice. The centerpiece of these styles of learning is artworks. Artists elevate our souls through their art and promote our awareness. They also balance the false images created by public media. If children have the needed knowledge for the background of the work of art and its reflection in the world covers children’s concern and distresses, their understanding and thought will be stimulated (Kain & Kain, 2013, p. 114). Children at their early ages are able to associate the stories, songs and anecdotes they hear from artists in their art artworks with their surroundings. Older children understand the motives behind cultural messages and not only resist them but also help others create novel and more different types. The important point here is that the world in a child’s mind is governed by value and credit not by material property and offensive and instructive cultural traditions (Saheb Ghalam, n.d., p. 425).

The issues concerning peace should be discussed in two levels. The first one is the macro indexes and covers issues like poverty and violence. However, the second level necessitates more specific and more detailed cognitive understanding. Racial, cultural, gender, class, ethnic, religious, public institutions, and the civil society etc. are among these issues.

Several techniques were traditionally used to teach social issues to children. These techniques were either child-centered or are related to various disciplines. Another more recent approach is the issue-based education. Teaching arts through issue-based technique is led through social, political and cultural frameworks and is mixed with other subjects to create a more balanced and more common teaching. Since various forms of art play a crucial role in combining whole and details, leaning and teaching important life skills, themes and concepts have to be supported so that activities like social sciences, mathematics, and verbal arts are balanced with visual arts, drama, music etc. (Cornett, 1999, p. 6).

Most teachers know that not all students will be professional artists in the future. However, they should be innovative and creative thinkers participating actively in a balanced and ideal society. As these students get older, teachers like them to be actively contributing life issues, make proper decisions for their lives and help optimize the society. Teachers wish to train students with the necessary knowledge for creating, pioneering and running the society. Studying art in a classroom through issue-based approach creates the possibility for educators and trainees to discuss their beliefs and ideas and discover solutions for their problems through acquiring knowledge. Visual arts also contribute to the preparation of the ground for these dialogues and their continuation. The issue-based approach in teaching arts enables students to study on subjects of peace and social issues and therefore they can develop criticizing skills and can interpret, create and review the visual culture surrounding them (Saheb Ghalam, n.d., p. 61).

Imagination plays a key role in arts classes. One of these roles is to let humans experience things from inside so that the worlds were common or an intimate commonality is created with the worlds or their creators. In these ways, things like transferring situations, e.g., painting, expressing feelings, e.g., music and both of them, e.g., pottery could be experienced (Eliot, n.d., p. 157). It should be noted that in an arts class for teaching peace, teachers and students do not aim to solve global conflicts but try to cover all about them. They use art to find creative ways to dominate the issues, ideas and problems. According to Staniszewski, the most valuable artists of the contemporary world possess such a great insight that challenge us constantly so that our view toward world changes. Artists prepare our minds and thoughts for adopting new ideas (Staniszewski, n.d., p. 289).

If education is to train active, responsible, socially creative and sensitive individuals to turn them into beneficent citizens, children have to participate in cultural affairs as critical learners. They should identify and collect their memories and life history, describe them artistically and challenge the presuppositions governing the atmosphere of education. The process of such transactions lets children understand the ever-changing character and structure of knowledge, protect it and reform it (Garoian, 1999, p. 84).

Arts classes develop the culture of peace and especially peace with the self and tranquility. Individuals learning art have more delicate souls and conduct fairer and more humane relationships. Very few painters or musicians use aggression to solve his everyday problems. Therefore, one of the major contributions of teaching arts to nurturing peace is that children can reach a higher tranquility through elevating children's humane spirit and providing them with an opportunity to release their feelings and internal problems. Moreover, leading an arts class toward teaching peace can increase peace seeking spirit and interest in peaceful relationships.

9. Methods of Teaching-Learning Arts and Nurturing Peace

Arts curriculums are based on experimental and practical approaches and prepare the ground for learners to benefit from aesthetic experiences and learn peace-oriented humanistic teachings. Some major teaching-learning methods in arts education are elaborated on here.

9.1 Introducing Historical Sites via Active and Inquisitive Methods

One of the methods of teaching peace to children is to introduce historical sites to them. This method utilizes buildings, regions, zones, structures and objects as documents of historical experience and cultural descriptions. Using this method, children can investigate historical and monumental buildings from distant past and discover their relationship with their environment. Furthermore, in this method, children learn how to protect historical sites and unique places. This method uses a background-behavioral approach. For instance, when someone looks at the Great Wall of China, she/he gets to know about the slavery and class system and can pursue the trend since those times into the present. In this method, memorial buildings and historical structures are considered as public art and investigated through peace-seeking approaches. Students learn peace with their environment and historical structures and attain hope and cordiality from museums and lives of the departed. When a teacher takes his students to the cemetery of veteran martyrs, according to McCarty (1995, p. 318), he does not praise war but commends those who sacrificed themselves to protect collective memories and lifestyles of the people in the territory. Moreover, these historical memorials do not induce regret but bring hope and reflect human challenges and tries for equality and liberty along with their sacrifice for their ideals. These memorials could teach

selflessness, coalition and keeping promises and tell them to unite righteously for the good of the public (Hoffman, 1997, p. 55).

Another example could be the teacher taking his or her students to Khaneye Mashroote (the House of Constitution) and draws their attention to the individuals who did their best for equality, justice and legislation. In an arts class, students could be asked to collect images and data on historical sites and share them in their classroom via dialogues. In this dialogue-oriented education, unity and the atmosphere of respect and free speaking creates an atmosphere of class dialogues. These dialogues create a profound and meaningful relationship between students and teachers. When a student and his teacher participate in a logical discussion, and let the atmosphere of wisdom and thought govern the class, the outcome will be rich with thoughts and introspection (Neyestani, 2012, pp. 155-156).

9.2 Dialogue and Telling Stories

Teaching peace in a classroom could be done through the method of telling stories. Thinkers in the field of child art and literature believe that telling stories has historically been a method of education and has proven to be efficient in disclosing the problems teachers and students faced in their lives. This educational method in which the relationship between time and space along with story tellers and the listeners is profound produces a valuable moral and individual experience. Besides, in this method, the story teller and the listeners create a world based on words and imagination (Ghezel Ayaq, n.d., p. 15). Telling stories as an approach strengthening strategies provides those who share their stories with the opportunity to critically analyze their discourse and find new solutions using each other's ideas and experiences. The creative and critical story telling method of education is liberating and is also the base for the critical education (Saheb Ghalam, n.d., pp. 38-39).

9.3 Creative Drama Method

Through creative drama method, teachings of peace could be taught to children and turn it into an integral part of students' lives. This drama could be performed by students or conducted as a puppet show. Children face numerous ideas while performing these plays and with the help of images and other educational tools coupled with physical activities and explain themselves. Thus, students use drama to link their internal relations with their experiences inside and outside school (Saheb Ghalam, n.d., p. 141). Since creative drama is an enjoyable activity, teacher as a choice maker could practice the concept of peace with proper selection of stories. Furthermore, planning the play and dividing the tasks along with taking turns and mutual respect before and while performing the play could intensify the spirit of peace and its related indexes.

9.4 Application of Music as Mixture

Using the limitless power of music in order to reach peace is also of vital importance. Music coordinates the five senses, improves internal order based on the principle of balance and beauty loving, and increases self-awareness, self-confidence and the feeling of self-value. Moreover, music expands the mindset of the child and effectively improve the spirit of teamwork, philanthropy, beauty-loving and positive thinking toward self and the universe. According to experiences in nursing schools, music positively influences the children with emotional and behavioral problems. In this regard, music prevents or decreases aggression, disobedience, irritation, anxiety, and mental phobias (Karimi, n.d., pp. 78-79). Besides, nurturing musical talents of children helps them better use harmony, coordination, rhythm, voice and value of tunes and forms their skills of listening, beauty, cordiality, balance and the holistic view to the world (ibid., p. 77). Thus, music could be used as a tool in arts classes. Music helps humans establish sound social relationships and peaceful life in the society. Music helps children and even adults find out about commonalities of different cultures and reach a deeper understanding about life (Salem, 2003, p. 18). In order to teach music to children, sounds of the nature including bird calls, wind, waterfall, trees and in whole the symphony of nature should be introduced to them (ibid., p. 36).

Other methods of improving peace skills in arts classes include painting, calligraphy, and pottery. Studying and teaching arts is a prolific interdisciplinary education available in the academic world for people of all levels ranging from kindergartens to universities and could contribute significantly to nurturing indexes of peace in educational system.

10. Discussion and Conclusion

According to these discussions, art for children and the things children do under the name of art has relationship with their benefit from awareness. In this regard, the common ground of art and childhood helps children become aware and revive the process of education without removing the childish philosophy as a result of mere abstract thinking.

Besides, type of thought influenced by art and aesthetics of poetic or philosophical thinking facilitates peace-oriented thoughts. Arts education through various and vast methods of art including visual arts, performing arts, cinema, music and other forms of art applicable in architecture provides different methods for revolutionizing the mind. Therefore, the role of content mediation of art for understandability of the truth about peace could not be neglected for in this way, art as content becomes the mediator for understanding and nurturing peace. This can bring the truth to children's mind and tongue and make it accessible through various methods.

Furthermore, arts curriculum refers to emotional quality of discourse and practice. Then, practicing and artistic discourse in the process of art lets teachings of art emerge. As a result, without mediation of art in the process of education, moral and humane education of learners will be incomplete and without arts education, peace-oriented behavior will not have a chance to emerge. Arts education gives the opportunity to the society and the cultural environment to create novel meanings in the minds of learners.

On the other hand, arts education's focus on centrality of human relations and the methods of creating and transferring meaning in the society institutionalizes it as an integral obligation. Society as a whole creates art and in a social process, art can intensify its mediating role in nurturing peace-oriented thoughts in children firstly as children and secondly as the future generation of the society.

Arts curriculum gives numerous opportunities to students so that apart from prescriptive and traditional methods and beyond limitations of the classroom communicate with the real world. Like language, art is of a multifaceted power in education which could function as a connecting device to enrich and link various aspects of human life. Primary school teachers' view toward arts is mostly a set of meaningless and repetitive activities. For them, art has no relationship with the lives of students and the education conducted at school. This reality that Art is used to pass time is a proof for lack of awareness about the potential power of art in primary schools. Issue-based arts education in a framework centered on social, political and cultural context could be guided in different ways, mixed with other subjects, taught combined with them and nurture peace.

Since arts education focuses on issues related to life and concerns of children, students are motivated to have a deeper look at themselves, other people and the surrounding environment. Teachers can get the help from their students and teach them how to investigate life issues artistically and creatively.

Another important characteristic dominating artistic activities is friendly cooperation and interaction. This is a vital factor in promoting peace. Dialogues among conducting artistic activities like painting, creative drama and artistic interpretation let the students know about deep relationship between art and society. Besides, students in these classes not only reach a new outlook about art but also they find themselves responsible agents for changing and reconstructing the diverse world. Peace forms in the personality of children and arts curriculum creates bravery. Then, the relationship between teacher and student with the most vital problems becomes an everyday one.

Formality in arts classes is much less than other classes and therefore, teachers can teach their students about tolerance, respecting other beliefs, various cultural and ethnic views, equality, and protecting the environment and institutionalize them. It should finally be noted that life without art may not endanger humankind but will surely make them poorer. It is hoped that the results from this study will help the officials in the ministry of education review curriculums through emphasizing arts curriculums and novel educational approaches for different grades especially the primary school years. This encourages schools and universities to enhance the standard in their art faculties. If officials and experts in the field of curriculums and arts education aim to train beneficent and philanthropist humans who love peace and nurture it in the society, school education and university could successfully do their responsibilities. It is hereby suggested that arts curriculums become integral to the curriculums in educational sciences and educational departments both qualitatively and quantitatively.

Moreover, school and university curriculums must take approaches with the help of students so that aesthetic and philanthropist potentials are learnt for social and artistic knowledge grows constantly in an orderly context. Students should learn that instead of memorizing facts they face in their everyday life they involve themselves. This could not be possible if cognitive, emotional, sentimental and mental and kinetic aspects are put together as the basis for arts curriculums. The present paper was the first step in identifying the need for arts curriculums in order to facilitate cordiality and peace in the society. These could be more applicable if teachers learn teaching methods, yet, this still has to be further investigated and planned carefully. It is also suggested that centers of curriculum planning and higher education universities analyze indexes of arts curriculum in different grades of

schools. This helps them design a plan suitable for intellectual capacity of the students and is based on critical thinking. The result will be the arts course as an important course in educational centers.

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Relationship between Emotional Intelligence and Psychological Empowerment of Police Staffs of NAJA Special Unit in Isfahan Province

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Abstract

This study aimed to investigate the relationship between emotional intelligence and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province. The present study was an applied research in terms of purpose and a descriptive correlational research in terms of method. The population of the study included Special Unit Command of NAJA in Isfahan province. The sample size was 336 people using Morgan's table. Data were collected through Spitzerz (1995)'s psychological empowerment questionnaire and Nobari's (2008) operational model of emotional intelligence. The validity of the questionnaires was confirmed by experts. The reliability of the questionnaires was confirmed using Cronbach's alpha. The Cronbach's alpha coefficients were 0.91 and 0.80 for psychological empowerment and emotional intelligence questionnaires, respectively. The data were analyzed Pearson correlation test and regression analysis. The results showed that there is a significant positive relationship between responsibility, flexibility, and decisiveness, and psychological empowerment of police staffs of NAJA Special Units in Isfahan province. According to regression analysis, responsibility, flexibility, and decisiveness had the highest impact on psychological empowerment, respectively.

Keywords: intelligence, emotional intelligence, psychological empowerment, Special Unit

1. Introduction

1.1 Introduce the Problem

Emotional intelligence is widely defined as the capacity to understand and control emotions (Kemp et al., 2005). In recent decades, attractive aspects of emotional intelligence and their impact have attracted not only psychologists and physicians' attention, but also public attention. The concept of social intelligence was first used in the 1940s. Then, Mayer and Salovey described emotional intelligence. Gardner's "Multiple Intelligences" theory played a major role in the formation of emotional intelligence theory. According to Gardner's "Multiple Intelligences" theory, there are two main types of intelligence: (1) Inner awareness and intelligence which helps to identify and differentiate people's complex emotions, and (2) knowledge and awareness of interpersonal relationships which helps to identify and distinguish the emotions and motivations of others. Finally, Daniel Goleman in his bestselling book "Emotional Intelligence" widely described this concept is and informed the public (Goleman, 1995).

Goleman (1995) explained that emotional intelligence involves the abilities, such as the ability to motivate you, stability in the event of failure; the ability to control impulses and desires, delaying and satisfy the desire; the ability to regulate mood and mental state temperament; and the ability to insist and hope.

There is the assumption that people have different skills in the comprehension, understanding, and using emotional information. In addition, emotional intelligence has a significant impact on health, and intellectual and emotional growth (Salovey et al., 2000).

Studies have shown that emotional intelligence predicts success in life more than intelligence quotient. People with high emotional competence have better social skills, more reliable long-term relationships, and a greater ability to resolve conflicts (Mayer & Salovey, 1993).

Although people are different in terms of expressing emotions for nature and genetic reasons, their learning ability and skills can be enhanced at all levels through training. Forasmuch as the first years of life provide a critical opportunity for the formation of emotional intelligence, this ability continues in the lifetime limitedly (Meyer et al., 1999).

Finally, the basis and cornerstone of human achievement include good intelligence quotient, training and development of cognitive skills, emotional control, the ability to empathize with the feelings of others, and in general, high emotional intelligence. Since this learning begins at birth and continues throughout life, it can always be improved through training. The theory of emotional intelligence provides a new perspective about the predicting factors affecting the success and primary prevention of mental disorders (Hosseini, 2004).

Daniel (1995, 1998) stated that cognitive intelligence causes 20% of success in the best conditions and 80% of success depends on other factors. Thus, many successes depend on the skills that make up emotional intelligence. If the relationship between emotional intelligence and other factors can be proved, it can be enhanced in terms of being acquired or learned. The concept of empowerment was first developed in the 1980s. Until the 1990s, the empowerment of human resources was considered as management practices such as delegation of authority to lower ranks of the organization called "mechanical approach". From the 1990s onwards, theorists proposed a new concept and stated that power is not given to employees, but they should gain it through proving the competence. Empowerment includes mental states in the working environment based on five feelings, including confidence, significance, competence, effectiveness, and independence (Goudarzi & Chegini, 2013).

The quality and capabilities of human resources are considered as the most important factor for survival of organizations and capable human resources empower organizations. An empowered organization is an environment where employees in different groups work together to carry out activities. The role of efficient, competent and knowledgeable human resources in achieving organizational goals is undeniable (Shirazi et al., 2013).

Empowerment begins with a change in beliefs, thoughts and attitudes of employees. They need to realize they have the necessary ability and competence to perform tasks, the freedom and independence in carrying out their activities. Furthermore, employees should believe that they have the ability to influence and control over their job results, pursue meaningful and valuable career goals, and are behaved honestly and fairly. Emotional intelligence is one of the features that can help managers and leaders in response to these changes. Emotional intelligence is an issue that tries to explain and interpret the emotions in human capabilities. Managers who have the emotional intelligence are effective leaders aiming at realizing goals with maximum productivity, satisfaction, and commitment of employees. Emotional intelligence assesses a person emotionally, in other words, it assesses the extent to which a person is aware of his/her emotions and can control them. Studies have shown that there is a positive relationship between emotional intelligence and psychological empowerment in an organization. Employees with higher emotional intelligence have more abilities than other employees. This difference is obvious at all dimensions of emotional intelligence other than self-awareness (Abedi et al., 2011).

Many studies on the relationship between emotional intelligence and other factors have been conducted in different regions of the world and most of them support of this relationship. Some of them are presented below.

Ballot (2007) conducted a study entitled "career success the effect of human capital, person environment fit and organization support the network structure of social capital". The results showed that individual's career success depends on individual variables, and a person's career success is associated with emotional, organizational, and human factors (Ballot, 2007).

The results of several studies in Australia show high levels of the performance of intelligent people are associated with cognitive, cultural, biological (nervous system), social, emotional, and mental aspects (McCann, 2005).

Oqinska (2005) conducted a study entitled "emotional intelligence in the workplace". This study was conducted on 230 nurses, teachers and managers and the results showed that emotional intelligence is an essential factor in determining success in life and mental health. Emotional intelligence has necessary effects on job stress and prevents negative impacts on mental health (Oqinska, 2005).

Weisinger (2000) defend emotional intelligence as the use of intelligence in guiding behavior and thoughts, effective communication with colleagues, supervisors, and customers, and the way of improving results (Weisinger, 2000).

According to Goleman, the importance of emotional intelligence increases in comparison with rational intelligence when the level of the organization increases. Emotional intelligence is of great importance to people, including a leader (Goleman & Boyatzis, 2001).

According to obvious importance of emotional intelligence in the success of various aspects of people's life, such as job, and with respect to the acquisition and learning of its concepts, this study seeks to answer the below question:

“Is there a significant relationship between emotional intelligence and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province?”

This study aims to investigate the relationship between emotional intelligence and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province. Thus, the results of this study can indicate the necessity of teaching the concept of emotional intelligence through experts to employees in organizations.

1.2 Explore Importance of the Problem

Many authors have stated about the potential capability of emotional intelligence and its impact on the ordinary lives of people. Thus, they have challenged an old belief that the human nature is related to the conflict between the heart and the brain. In addition, people believe that emotional intelligence can improve people's health, public welfare, wealth, success, love, and happiness. Emotional intelligence is the key to success and effectiveness in many group and organizational matters, such as effective management, creating entrepreneurial spirit, and increasing incentives to work (Abedi et al., 2011).

According to newness of the issues related to emotional intelligence, it is necessary to perform accurate and scientific assessments for the authenticity of the claims. Human resources as the most valuable asset of any organization are faced with some problems. Thus, management and organizational psychology experts can increase positive factors and decrease negative factors in human performance. Nurturing the innate human abilities is considered as an effective factor in maintaining mental and emotional balance and strengthening people's perception (Shirazi et al., 2013).

Thus, this question is raised: “is there a relationship between emotional intelligence as an innate human ability and psychological empowerment in a social system?” According to Islamic Republic of Iran Police as a knowledge-based organization to ensure discipline and security, it is necessary to gain functional and scientific acceptability at the community level. Forasmuch as emotional intelligence can help organizations such as the police force, it is important to effectively use emotional intelligence for employees' psychological empowerment, especially in times of crisis. Thus, employees can improve crisis management and enhance empathy and communications with others. Given the lack of research in this field, the present study addresses the concept of emotional intelligence and its different dimensions as well as the concept of psychological empowerment and its components, including employees' attitudes and perceptions of their role, effectiveness, authority, usefulness, and competence in the organization.

1.3 Describe Relevant Scholarship

This section describes relevant scholarships.

Shirazi et al. (2013) investigated the effect of emotional intelligence and psychological empowerment on occupational performance, with mediator role of citizenship. For this purpose, 96 questionnaires were distributed among a sample of employees of private trading companies in Mashhad. Data were collected using structural equation model in SPSS and WarpPLS software. The results indicated that psychological empowerment and organizational citizenship behavior directly affect job performance. In addition, psychological empowerment and emotional intelligence were effective in organizational citizenship behavior. Organizational citizenship behavior also played a mediating role in the relationship between psychological empowerment and emotional intelligence and job performance. Finally, some suggestions were offered for managers of the company to improve job performance.

Shamshirkar (2010) investigated the relationship between emotional intelligence (EQ) and psychological empowerment of human sources in National Iranian Copper Industries Company. The relationship of factors, such as environmental conditions, management strategies, and sources of self-efficacy as factors affecting empowerment in the company, were investigated. In this study, some hypotheses were posed to investigate the relationship between four independent variables of emotional intelligence and dependent variables, including organizational conditions, managerial strategies, sources of self-efficacy, and psychological empowerment. 206 questionnaires were distributed among managers and experts selected using simple random sampling in National Iranian Copper Industries Company. Correlation analysis, regression analysis and Structural Equation Modeling

(SEM) were used to analyze the data. The results indicated that there is no significant relationship between emotional intelligence, management strategies, and psychological empowerment. There was a significant relationship between organizational conditions and sources of self-efficacy, and the independent variable. According to the results of path analysis, management strategies and emotional intelligence indirectly affected psychological empowerment. Finally, some suggestions were presented for each hypothesis.

Abedi et al. (2011) investigated the relationship between managers “emotional intelligence and empowerment of human resources” in Payam-e-Noor University in East Azerbaijan Province. In this study, a descriptive correlational method was used. The population of the study included all managers and human resources (administrative and academic employees other than managers) in Payam-e-Noor University in East Azerbaijan Province in 2009-2010. 20 managers and 80 human resources were selected using cluster sampling. The results of Pearson correlation indicated that there is a significant relationship between components of emotional intelligence (happiness, stress tolerance, assertiveness, realism, impulse control, flexibility, responsibility, and self-actualization) and empowerment of human resources. According to the results of multiple regression analysis, components of emotional intelligence predicted the significance of psychological empowerment of human resources and 75% of changes in the variability. The managers’ empowerment and emotional intelligence in Payam-e-Noor University in East Azerbaijan Province were more than the moderate limit.

Morais et al. (2015) investigated knowledge and empowerment in Northern Portugal. The statistical sample of the study included 384 employees of manufacturing companies. The data were analyzed using SPSS software. The results of the study showed that knowledge and knowledge management are effective in managers’ empowerment.

Benton et al. (2014) investigated the effect of commitment and empowerment on knowledge management in domestic and foreign affiliated firms in Japan. The population of the study included all employees of domestic and foreign affiliated firms in Japan. Data were analyzed using Amos Software. The results of the study showed that organizational commitment and empowerment are effective in knowledge management.

1.4 State Hypotheses and Their Correspondence to Research Design

According to the above-mentioned statements about the impact of emotional intelligence on psychological empowerment in different fields of life, such as job, this study aims to investigate the relationship between emotional intelligence and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province. For this purpose, the impact of the components of emotional intelligence, including responsibility, flexibility, and decisiveness, on psychological empowerment is investigated. As a result, the following three research hypotheses are formulated:

First hypothesis: there is a significant relationship between responsibility and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Second hypothesis: there is a significant relationship between flexibility and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Third hypothesis: there is a significant relationship between decisiveness and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

2. Method

2.1 Identify Subsections

The present study is an applied research in terms of purpose and a descriptive correlational research in terms of method. It is a descriptive research because it aims to objectively describe the real and regular events, and conditions or phenomena (Sharifi & Sharifi, 2004).

2.2 Participant (Subject) Characteristic

The population of the study included 2600 police staffs of NAJA Special Unit in Isfahan province. All of them were male and had an academic degree.

2.3 Sampling Procedures

The sample size was 336 people, consisting of directors, commanders and employees of Special Unit Command of NAJA in Isfahan province, using Morgan’s table. All of them had an academic degree. The statistical sample was selected using stratified sampling. After selecting the statistical sample, the research steps were implemented.

2.4 Research Instruments

Spitzerz (1995)'s psychological empowerment questionnaire was used to collect data on psychological empowerment. Forasmuch as this questionnaire was standard, the experts had confirmed its validity. Abdollahi (2005) measured the reliability of this questionnaire using Cronbach's alpha test in SPSS software. The Cronbach's alpha coefficient was 0.91. Nobari (2008)'s operational model of emotional intelligence was used to collect data on emotional intelligence. The experts confirmed its validity. The reliability was confirmed using Cronbach's alpha coefficient (0.80).

Pearson correlation and regression analysis were used to analyze the data. In this study, variables were quantitatively measured and the sample was too large. Pearson correlation coefficient was used to test hypotheses and the independent samples t-test was used to compare the means of two independent groups.

3. Results

This section presents the results obtained from the data analysis. Thus, the above-mentioned hypotheses are examined as follows:

First hypothesis: there is a significant relationship between responsibility and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Table 1. First hypothesis test

		responsibility	psychological empowerment
Responsibility	Pearson correlation coefficient	1	0.468
	Sig	-	0.000
	N	384	384

As displayed in the above table, the sig-value (0.000) is below 0.05. Thus, the null hypothesis is rejected. At the 0.05 error level, there is a significant positive relationship between responsibility and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province. In other words, responsibility increases psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Second hypothesis: there is a significant relationship between flexibility and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Table 2. Second hypothesis test

		flexibility	psychological empowerment
Flexibility	Pearson correlation coefficient	1	0.283
	Sig	-	0.000
	N	384	384

As displayed in the above table, the sig-value (0.000) is below 0.05. Thus, the null hypothesis is rejected. At the 0.05 error level, there is a significant positive relationship between flexibility and psychological empowerment of police staff of NAJA Special Unit in Isfahan province. In other words, flexibility increases psychological empowerment of police staff of NAJA Special Unit in Isfahan province.

Third hypothesis: there is a significant relationship between decisiveness and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Table 3. Third hypothesis test

		decisiveness	psychological empowerment
Decisiveness	Pearson correlation coefficient	1	0.381
	Sig	-	0.000
	N	384	384

As displayed in the above table, the sig-value (0.000) is below 0.05. Thus, the null hypothesis is rejected. At the 0.05 error level, there is a significant positive relationship between decisiveness and psychological empowerment of police staffs of NAJA Special Unit in Isfahan province. In other words, decisiveness increases psychological empowerment of police staffs of NAJA Special Unit in Isfahan province.

Table 4. Regression analysis

Model	Sum of squares	Degree of freedom	Mean Square	F	Significance level
regression			38.64		
Remaining		331	0.77	49.81	0.000
Total		334			

As displayed in the above table, the sig-value (0.000) is below 0.05. Thus, the null hypothesis is rejected. It can be stated that there is a linear relationship between independent and dependent variables.

Table 5. Results of regression testing

Model	B	Std. Error	Beta	t	sig
Constant	1.84	0.334		5.52	0.000
Responsibility	0.371	0.053	0.404	7.03	0.000
flexibility	0.189	0.037	0.231	5.17	0.000
decisiveness	0.141	0.054	0.171	2.38	0.008

According to Table 5 in column B, the values of the regression coefficients and constant are provided. The regression equation is presented below. It should be noted that those with the sig-value higher than 0.05 are removed from the equation because the equality of regression coefficients and constant value is accepted with a value of zero.

$$Y=1.84+0.371\times 1+0.189\times 2+0.141\times 3$$

According to Column B, it cannot be concluded that a variable with a higher coefficient has a greater impact on the dependent variable because units of measurement are different for variables. Therefore, standardized beta coefficients regardless of their sign (+ or -) are used to compare the effects of variables.

According to Table 5, the column "standardized coefficients (Beta)", responsibility has the greatest effect on psychological empowerment because for a one unit change in this variable, the independent variable changes about 40%. After responsibility, flexibility and decisiveness had the highest impact on psychological empowerment, respectively.

4. Discussion

In addition to presenting hypotheses and findings related to them in this section, the results of the hypotheses and conclusion are discussed.

First hypothesis: there is a significant relationship between responsibility and psychological empowerment of police staff of NAJA Special Unit in Isfahan province.

According to the results of data analysis, this hypothesis was confirmed. Thus, there is a significant positive relationship between responsibility and psychological empowerment of police staff of NAJA Special Unit in

Isfahan province. In other words, responsibility increases psychological empowerment of police staff of NAJA Special Unit in Isfahan province. Forasmuch as the sample group had an academic degree, people's responsibility as a job requirement can be intervened and increased in different ways, such as holding workshops or training people through books, training package, Internet, etc.

Second hypothesis: there is a significant relationship between flexibility and psychological empowerment of police staff of NAJA Special Unit in Isfahan province.

According to the results of data analysis, this hypothesis was confirmed. Thus, there is a significant positive relationship between flexibility and psychological empowerment of police staff of NAJA Special Unit in Isfahan province. In other words, flexibility increases psychological empowerment of police staff of NAJA Special Unit in Isfahan province. The second hypothesis is important because the Special Unit has a nature to communicate with different people logically and properly and provide security in society. Thus, this organization should be familiar with the proper concept of flexibility and its advantages and disadvantages. In addition, police staffs should learn this skill in different ways in order to increase their psychological empowerment through this skill.

Third hypothesis: there is a significant relationship between decisiveness and psychological empowerment of police staff of NAJA Special Unit in Isfahan province.

According to the results of data analysis, this hypothesis was confirmed. Thus, at the 0.05 error level, there is a significant positive relationship between decisiveness and psychological empowerment of police staff of NAJA Special Unit in Isfahan province. In other words, decisiveness increases psychological empowerment of police staff of NAJA Special Unit in Isfahan province.

Forasmuch as the border of the relationship between aggression and decisiveness is unclear and decisiveness (the ability to consider the rights and respect for others' rights) is sometimes confused with aggression and according to specific conditions of police force and in particular the special unit, the concept of decisiveness should be trained properly so that police staffs can use it in the right place. Since most of them had an academic degree, this training can be efficient and increase their psychological empowerment in the workplace.

The results showed that there is a significant positive relationship between responsibility, flexibility, and decisiveness (as components of emotional intelligence) and psychological empowerment of police staff of NAJA Special Units in Isfahan province.

According to the results of the regression testing, responsibility has the greatest effect on psychological empowerment because for a one unit change in this variable, the independent variable changes about 40%. After responsibility, flexibility and decisiveness had the highest impact on psychological empowerment, respectively.

The results of the present study were consistent with the results of studies conducted by Shirazi (2013) and Abedi (2011). Therefore, an increase in each factor will lead to increasing people's psychological empowerment.

The present study had limitations in terms of performance as well as scientifically, which include:

(1) The sample size was limited to 336 people consisting of male directors, commanders and employees with an academic degree in Special Unit Command of NAJA in Isfahan province. Thus, the findings of the study should carefully be generalized to other samples.

(2) The sample size was limited to police staffs of NAJA Special Unit in Isfahan province. Thus, cultural and social issues specific to Isfahan province should be considered for generalizing the findings of the study to other provinces.

4.1 Research Suggestions

(1) Researchers can investigate the relationship between emotional intelligence and psychological empowerment of individuals in different sample groups in other regions.

(2) Since educated people have higher emotional intelligence, this factor should be controlled to obtain more accurate results.

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Youths Involvement in Self-Help Community Development Projects (SHCDPs) in Nsukka, Enugu State, Nigeria

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Abstract

In developing countries like Nigeria, every citizen has the right to be involved in any development activities that is targeted at meeting the “felt needs” of their community rather than wait endlessly for government intervention. Self-help community development activities like construction and maintenance of community roads and rural electrification among others, are expected to be facilitated by all the stakeholders in the community, including the youths who are legitimately the future custodian of the welfare of their community and the greatest investment that can be utilized to mobilize local material resources for the community as well as the country’s development. This study therefore poses that, if youths are recognized as clear assets in self-help community development projects, the youths with their wealth of experiences and energy can be engaged effectively in meaningful tasks for the improvement of their environment. Thus, the issue of youth migration or abandonment of projects can also be ameliorated. Quantitative and qualitative data were collected on self-help projects embarked on in the communities studied, areas of youths involvement in self-help projects and the constraints encountered by youths. Findings of the study revealed that the Nsukka communities studied embarked on rural electrification, construction of boreholes and water drainage facilities among others; the areas of youths involvement in self help community projects was low; while youths not given free hands to be involved in SHCPs and parents not allowing their youths to be involved in SHCPs among others, were constraints to youths involvement in self help community projects. Recommendations were made based on the findings of the study.

Keywords: youth, involvement, self-help, community development projects

1. Introduction

From the earliest period of human history people have enjoyed and shared together the good tidings of nature because of the existence of communities and the social activities engaged by the people for the progress of their community, which is better called Community Development (CD). Community development marks the stage in the life of a community where by members come together to take collective actions in order to generate solutions to their identified problems. Community development in this context can be said to be a self-directional effort of the people by the people and for the people. For Hill (2011), it means a coordinated approach whereby the community members undertake programs and projects in order to better the living condition of the people residing in that community. This according to Johnson (2008) implies the improvement in the physical and material wellbeing including livelihood of people in the community. Community development therefore, help people to recognize and develop their ability and potential in order to address their problems and needs which they share (Effiong, 2012).

Some scholars like Afuye (2015) posit that community development is a structured intervention that gives communities greater control over the conditions that affect their lives. This however, does not solve all the problems faced by a local community, but it does build up confidence to tackle such problems as effectively as any local action can perform. In essence, community development works at the level of local groups and organizations rather than with individuals or families. Implying that community development has to look both ways; not only at how the community is working at the grassroots, but also how responsive key institutions are to the needs of local communities. Community development however, appears in different forms in different countries regardless of

their level of development but they uphold the same basic principles of people's involvement in bringing about better socio-economic and political conditions of the people; irrespective of their cultural differences.

In Nigeria, community development is not new either. Oduaran (1994), Tolu and Abe (2011) observed that before the advent of colonial administration, various communities designed development-oriented activities on their own in order to improve their standard of living. The spirit of self help which forms the present day strategy for community development guided the zeal of the people as they harnessed their local resources and undertook community development projects like building of markets, community halls, road expansion and maintenance, tree planting to check erosion and communal palm fruits harvesting, amongst others. Hence, CD could be regarded as a skilled process which hinges on the approach that controls and uses assets to promote social justice and improves the quality of community life.

From the foregoing, self-help community development projects in Nigeria are basically an attempt to address the "felt needs" of the masses by the people and for themselves. According to Oduaran (1994), self-help community projects are those tangible ventures that the inhabitants of the community embark on, in order to improve the conditions of people residing in that community. For example, Anyanwu (2010) noted that in some south-east Igbo speaking communities, part of the money realized from sale of communal palm fruit harvested was used to sponsor the education of indigent students in the community as well as execute other small and medium scale development projects spanning across a variety of fields such as improving health care delivery services, agriculture, nutrition, communal road maintenance, sanitation and rural cooperative thrift services. One of the basic assumptions of community development herein is that community development activities are all inclusive as it provides opportunity for people to learn and grow thus, ensuring that no segment of the populace is exempted, youths inclusive.

The youths in question can be conceptualized as a people within the age bracket of 13 and 24 years (Liveright, 2013), 15 and 24 (UNESCO, <https://www.unesco.org-21-5-15>), but varies around the world (UN, 2008). For example in Nigeria youths are limited to the ages between 16 and 35 years, whereas in Cameroun it is a period between the age of 14 and 25. Youth is a period of transition from being dependent to construction of self concept, being influenced by peers, life style and gender. Youths constitute the most active labor force of every community. There are about 1.2 billion youths between the age bracket of 15 and 24 years old in the world and about one billion live in developing countries (World Bank Report, 2010). Similarly, National Bureau Statistics Youth Survey Report (2012) showed that nearly 50% of developing world population are youths within the age bracket of 15 and 35. This is often referred to as the youth bulge, since young people constitute a high proportion of many country's population as evidenced in Nigeria with a population over 174,507,539 million people out of which 64 million are youths with about 54% of them unemployed (Nigeria National Baseline Youth Survey, 2015).

This increase in youth population represents both a challenge and a responsibility to the society, as majority of them may not have any source of income and livelihood. It is visibly noticed in the society today that the lingering effect of youth bulge creates un-conducive atmosphere in various communities with most of them being idle, unemployed and displaying unruly behaviors (Rowland, 2011). Definitely, being young is a transitional phase of life which carries with it increased vulnerabilities and delinquencies. If the youths are not adequately harnessed it becomes a problem. Youths therefore, could be effectively mobilized and involved as assets, beneficiaries, partners and youth leaders in community development activities which abound in various communities; instead of displaying their unruly behaviors as militants, terrorists and other restiveness in the community and society today.

Involvement is the act of participating in the achievement or accomplishment of a particular task. Youths involvement in the context of this study means giving the youths opportunity to effectively participate as facilitators in community development agenda in all the stages because of the effect it will have on their lives now and in future. Through their involvement they will be acquainted with the myriad of problems in their communities and suggest remediation. It is worth mentioning that historically, youths have played a very prominent role in the continual process of governance. They are also responsible for the various changes as witnessed in the history of various nations. Youths generally are daring, full of energy and vigor, inquisitive, enterprising, exuberant, self-sacrificing, full of dreams, beautiful initiatives and hopes. All these attributes of youths can be used to boost community development projects. There is a strong belief that their effective involvement in self-help community development projects by community leaders is desirable in our quest for the qualitative development of our rural communities especially in these days of continued cutbacks in the votes for development by the government at all level. It could also, to a great extent make the youths become responsible and realize that they also have a commitment to themselves, to their communities and nation at large.

Interestingly, participation in community development of the entire population and all individuals including youths was the theme of the 1986 United Nation Declaration on the Right to Development which was first recognized in 1981, in article 22 of the African Charter on Human and Peoples' Rights; that everybody shall have the right to their economic, social and cultural development with due regard to their freedom and identity . . . , and subsequently proclaimed by the United Nations in 1986 as a group right of people which was reaffirmed by the 1993 Vienna Declaration and Program of Action. Hence, a right-based approach to youths involvement in community development has been advocated and widely adopted by many countries and bilateral donor agencies. Understandably, development involves the participation of all (irrespective of age, sex or status) directly and indirectly without any individual or groups being isolated.

Literature showed that in most developing countries, community development projects have not been given so much consideration because of the prevalence in social exclusion of youths from the societal plan of action (World Bank, 2010). The social exclusion of majority of youths in community development activities is prevalent in the developing parts of the world including Africa and Asia. Little wonder, there is currently a shift in working with young people towards positive direction and valuing them as assets, advisors, colleagues and perhaps leaders. In development parlance, such leaders in the community are regarded as change agents. Abiona (2012) noted that community leaders are agents of change that motivate and mobilize community members to improve their standard of living. Hence, youths can also be involved in facilitating progress of their communities through their youth groups, right from the goal setting, problem solving and goal achievement. That means involving them from the planning stage through executing, influencing, directing, supervising, coordinating and evaluating development activities.

However, Hermsillo (2012) argued that when working with youths, it is also vital to consider and acknowledge the decision-making dynamics of any given situation, because young people are often in a situation where decisions are being made for them and exerted over them by older adults and this scenario is pathetic. Understanding the dynamics of youths in every local context is therefore essential for effective community development activities. This is because each generation of youths certainly would exhibit their own characteristics and may face different challenges that would also require its own peculiar solution approach. No wonder Kelly (2008), Olufemi (2014) noted that in most developing countries of the world, the youths have not been properly integrated into community development activities of their various governments and communities. According to Olufemi, it has always been a common belief among most people in developing countries like Nigeria, that every development issue is the sole responsibility of the government and perhaps their agencies, to provide infrastructural and physical facilities as well as social amenities. Considering the obvious economic crisis in Nigeria, it may not be possible that government budget capacity can accommodate the magnitude of development challenges in the country. Consequently, communities seem to be on the right track to improving their welfare facilities through self help development activities.

Onah (2013) is concerned about the various institutions including schools that exist in developing countries that are not helping matters too, as many youths are continually being excluded from community development activities. The writer noted with dismay that the exclusion of youths from development activities at community or even national levels has negatively affected their contribution towards so many development projects that abound in various communities. This may be true as evidenced from pilot study of communities in Nsukka Local Government Area of Enugu State Nigeria, under study, where there are visible abandoned self-help community development projects, such as community self help rural electrification project, massive erosion sites without appropriate drainage, chain pot holes and bore-hole water projects among others. Perhaps, if the youths were given free hand and effectively involved, they could have provided at least remediation for the chain pot holes and drainage system. Youths are recognized as the key human resources required for helping most communities meet the new challenges of their environment as well as their subsistence needs and in doing so, improve local people's long-term security and control over their own lives (Zeldin, 2012). Generally, they are equipped with indigenous knowledge, skills and resources that can be utilized in making sure that community self-help projects do not die a natural death or abandoned. In fact, their involvement is very essential for any community that is aspiring for massive development (Sieng, 2012). Youths can be important facilitators of community development projects because they are innovative, inquisitive, creative in problem solving and solution finding, have enduring interest during discussions and continuous dialogue during ongoing projects in order to forestall anomalies at the early stage, which if not rectified will cause irreparable damage to the projects.

Considering the fact that community development has a wide variety of activity, it is expected that effective involvement of all beneficiaries in the activities gives them the opportunity to learn how to develop their potentials or talents and acquire more relevant skills that would help them to grow and contribute meaningfully to their

community and society at large. However, another critical factor that may impede youth involvement in community development in developing countries like Nigeria, is that majority of the youths are still dependent on their parents for the provision of basic needs which include: education, food, shelter and clothing and as such do not assume responsibilities till they even get married. In situations like this, it could be perceived that most youths may be non-challant, passive and even decline in community development activities because they lacked ideas on what to do and would not be taken seriously for any responsibility. In a contrasting view Adefemi (2008) reiterated that youths generally, are capable and known to have so much energy to expend in the implementation, facilitating, monitoring, supervision, and evaluation of community development projects and as such, it is imperative to re-position the youths by engaging them effectively in meaningful development activities in their various localities instead of their being liability to the community and self-help projects being paralyzed or abandoned; when the youths would have been utilized in executing such development projects. Although one begins to ponder on why many projects meant for the people's own welfare are abandoned. Anyanwu (2010) submits that most abandoned community projects are attributed to lack of political will, poor planning, implementation, inadequate funding, monitoring, supervision and formative evaluation of the projects; whereas the youths would be very useful in this regard because of their wealth of knowledge, technology and energy they can expend in performing developmental tasks. Smith (2010) also argued that youths are a heterogeneous group with wealth of life experiences, cultural background, education and social group affiliation that can make positive impacts in the community depending on where they live. Therefore, considering the dividends that may accrue to various communities if the youths are adequately involved and utilized in community development projects, it would to a very great extent help to reduce further abandonment of projects and also help to curb rural-urban drift of youths and various social ills in rural communities and the society.

Hence, the need for this study which seeks to examine the involvement of youths in community Development Projects. Any attempt to examine their involvement must require the gathering of information using various methods to systematically assess the effectiveness and efficiency of the subject being investigated. Assessment according to Maxwell (2013) is the coordinated process of evaluating, investigating and examining a given phenomenon in order to ascertain useful information and feedback that will be used to address pertinent problems about the phenomenon. Thus, this study will provide information on the self-help community development projects embarked upon by communities in the study areas, ascertain the areas of youths involvement in self-help community development projects and finally find out the constraints to youths involvement in self-help community development projects in Nsukka Local Government Area of Enugu State.

1.1 Statement of the Problem

Most communities in developing countries like Nigeria are known for embarking on self-help development projects but the sad irony is that they hardly complete most of these projects. Consequently, it appears that their efforts are not commensurate with all they have invested. Evidence from the pilot study by the researcher's in the study area, showed some abandoned self-help projects. It seems not possible to even ascertain the areas and level of involvement of all stakeholders in the communities especially the youths who are supposed to fast track development activities in their communities. Although, literature showed that community development officers and experts especially in developing countries, like Nigeria, have frowned at the low involvement of youths in community development. So many reasons have been adduced for such anomaly, which include; that youths seem not to be considered as matured people and as such have been excluded right from decision making process, planning, implementation, supervision and evaluation of community development projects by community development stakeholders. The stakeholders in question include all parents, community leaders in the community. In some rare occasion, when the youths willingly participated in community development activities, they seem not to be given a free hand to participate in vital issues like, decision making process, project implementation, supervision and evaluation. Could it be that community leaders and other stakeholders are not convinced that if the youths are effectively involved in their own community development projects, it would to a great extent reduce abandonment of self-help projects, make significant impact on the lives of the people now and in future, as well as help to curb various social ills which has eaten very deep like cankerworms into the fabrics of societies world over. Hence, the essence of this study which focused on examining youths' involvement in self-help community development projects in Nsukka local government area of Enugu State.

1.2 Review of Materials Related to This Study

Ezenyem (2012) carried out a study titled "Families Involvement in Self-help Community Projects for Sustainable Development: A Case Study of Amadunu Community in Nnobi Idemili South Local Government Area of Anambra State". The population of the study consisted of 200 respondents. Questionnaire was used for data collection, while simple percentage was used to analyze the data collected. Some of the major findings were that:

the people of Amadunu community participated actively in community development efforts as could be seen from the various projects they embarked upon and which some were completed, while others were nearing completion. Ezenyem's study is related to this present study because both emphasized on self-help community development but vary in the aspect that the former centered on families involvement in self-help projects while the later focused on youths involvement in self-help community development projects.

Nwankwo (2008) carried out a study titled "Factors Militating against the Involvement of Women in Community Development Projects in Oyi Local Government Area of Anambra State". The population for the study consisted of 600 registered members of women organizations in the local government. The researcher used simple random sampling technique to determine the sample size of 300 respondents for the study. A 20-item questionnaire was the instrument used to elicit information from the respondents. The data were analyzed using mean and standard deviation. The findings revealed that illiteracy among majority of the women and inadequate mobilization were major factors that affected the women's involvement in community development projects in Oyi Local Government Area of Anambra state. The study is related to this present study because both studies focused on involvement of youths and women in community development projects but differed from the former which examined only the factors militating against the involvement of women in community development projects while the present study was centered on ascertaining the projects embarked upon, areas of youths involvement in community development projects and the constraints.

Finally, Anderson (2005) carried out a study to determine the level of youth's participation in community development projects in Lima town in the South American country of Peru. The study adopted a descriptive survey research design. The population for the study was 150 youths purposively selected from 305 youths in five localities. There was no sampling because the population was a manageable size. Using a one way analysis of variance (ANOVA) to analyze the data, it was revealed that a small percentage of 31.5% or 71 youths involved voluntarily in community development projects in Lima, while majority 68.7% of youths, because of their illiteracy and poverty, exhibited a laissez faire attitude towards the development of their community. Both studies are related in scope but differed in the analytical tool used and the area of study.

1.3 Purpose of the Study

The general purpose of the study was to examine youth involvement in self-help community development projects in Nsukka Local Government Area (LGA), Enugu State. Specifically, the study sought to:

- (1) Ascertain self-help community development projects embarked upon by communities in Nsukka, LGA, Enugu, State.
- (2) Ascertain the areas of youth's involvement in self help community development projects.
- (3) Determine the constraints to youth's involvement in self-help community development projects in Nsukka, LGA.

1.4 Research Questions

The following research questions guided the study:

- (1) What are the self-help community development projects embarked upon by communities in Nsukka, LGA of Enugu State?
- (2) What are the areas of youth's involvement in self-help community development project in Nsukka, LGA of Enugu State?
- (3) What are the constraints to youth's involvement in self-help community development projects in Nsukka LGA of Enugu State?

1.5 Hypotheses

The following null hypotheses were formulated for the study and tested at 0.05 level of significance.

HO₁: There will be no significant difference between the mean ratings of male and female youths respondents on the various self-help community development projects embarked upon by communities in Nsukka LGA, Enugu state.

HO₂: There will be no significant difference between the mean ratings of community leaders and youths on the constraints to youth's involvement in self-help community development projects in Nsukka LGA, Enugu state.

2. Research Method

The study adopted descriptive survey research design. Descriptive survey research design according to Nworgu (2015) aims at studying a group of people by collecting and analyzing data from a sample of the same group, considered to be a representative of the entire group. This design is considered appropriate for this study because it helped in eliciting information from the respondents on youth's involvement in self-help community development projects in Nsukka Local Government Area of Enugu State, Nigeria. In addition, a qualitative method of field survey in the form of Focus Group Discussion (FGD) was also used. Trammelan (2010) opined that Focus Group Discussion is a group of discussants that are directed through a well prepared questioning sessions addressing the subject under consideration, with a moderator who guides the group. The FGD provides a two-way communication, offers time for in-depth discussion, provides immediate feedback on new information, promotes group spirit when common concerns are identified and allows for emotional as well as intellectual reactions to responses. Hence, both quantitative and qualitative methods of field survey were used in this study by the researchers. The study was conducted in Nsukka Local Government Area, Enugu state, which is one of the largest in the state. It is made up of twelve towns namely: Nsukka, Obukpa, Opi, Obimo, Alor Uno, Eha-Alumona, Ede-Oballa, Okpuje, Lejja, Edem, Ibagwa-Ani and Okutu. The people of this area have some common characteristics which includes: common beliefs, culture and value system. The area was preferred because of the researchers concern for abandoned projects which could have to a great extent, enhanced the standard of living of the people.

The population of the study was all the 4,012 respondents, comprising 4,004 registered members of community based youths organizations and eight (8) community leaders in the eight (8) out of twelve (12) towns in Nsukka Local Government Area. The sample for the study was 408 respondents comprising 400 males and females youths registered members of community based youth organizations and 8 traditional community leaders (all males). A proportion of 10% of the population, 4,012 respondents was used as sample size for the study. The choice of 10% was based on the premise that if the population is in a few thousands a sampling interval of 10% will do (Nwana, 1991).

Two instruments were used for the study. A 20-item structured questionnaire titled. Youths' Involvement in Community Development Projects Questionnaire (YICDPQ) and a Focus Group Discussion guide (FGD) developed by the researchers. The quantitative research instrument was structured along a four point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with numerical values in descending order of 4, 3, 2 and 1.

The Focus Group Discussion (FGD) guide was used to elicit information qualitatively from twelve youths who were randomly selected from four community-based youth organizations not used for the study, but share the same characteristics with the actual subjects. The FGD guide was designed in two parts. Part A was an introductory letter written by the researchers to acquaint the respondents with the purpose of the discussion and thereby solicit their co-operation while given information on issues that was raised during the discussion.

Part B of the FGD was based on the purposes and research questions used for the study. This section was made up of three open-ended questions which the moderator followed diligently. Although other related questions were raised as the need arose.

The two instruments, Questionnaire and Focus Group Discussion guide were given to three experts for validation. Two of the experts were from the department of Adult Education and Extra-Mural studies and one from the department of Science Education Measurement and Evaluation; all in the University of Nigeria, Nsukka. The comments made by the experts were used in modifying the instrument.

The reliability of the instrument was ascertained through a trial test method. Twenty (20) copies of the research instrument were administered on 20 members of five youth organizations in Uzo-Uwani Local Government Area of Enugu State who share the same characteristics with those in the study area but were not used for the study. Cronbach Alpha was used to ascertain the internal consistency of the questionnaire items. The internal consistency reliability coefficient obtained for each of the clusters A, B and C was 0.71, 0.73 and 0.89 respectively. The overall reliability index was 0.78 which was deemed high enough for the study. The research questions were analyzed using mean and standard deviation. The mean benchmark for answering the research questions was 2.5 criterion mean. This means that any item with a mean score of 2.5 and above was accepted while a mean score below 2.5 was unaccepted. T-test statistics was used to test the two hypotheses at 0.05 level of significance. The FGD was transcribed and analyzed qualitatively.

Table 1. Mean and standard deviation ratings on the self-help community development projects embarked on by communities in Nsukka LGA, Enugu state

Items	Youth (N=400) Mean	Community Leaders (N=08)				
		SD	Decision	Mean	SD	Decision
Involved in Rural electrification project	3.70	0.76	A	3.87	0.35	A
Water bore-hole Project.	3.26	0.48	A	3.38	0.52	A
Construction of community market.	3.35	0.61	A	3.50	0.53	A
Construction of drainage facilities.	3.35	0.48	A	3.50	0.53	A
Community school renovation project.	3.61	0.49	A	3.63	0.52	A
Community Recreational facility project.	3.49	0.50	A	3.63	0.52	A
Community health centre project.	3.63	0.48	A	3.50	0.53	A
Community road construction project.	3.26	0.65	A	3.00	0.76	A

NB: A=Agreed; SD=Standard Deviation.

Table 1 above presents the various views of youths and community leaders on the self-help community development projects embarked on by communities: From the results, respondents agreed to all the item statements with the corresponding mean scores, ranked from the highest to the lowest: 3.70, 3.63, 3.61, 3.53, 3.49, 3.35, 3.26 and 3.26, for youths and the mean scores in the same descending order for community leaders were 3.87, 3.63, 3.63, 3.50, 3.50, 3.50, 3.38 and 3.00 respectively. These mean scores are higher than the criterion mean of 2.5. Implying that both the youths and community leaders agreed that communities in Nsukka LGA embarked on the above named self-help community development projects.

Table 2. Mean and standard deviation ratings showing the areas of youths involvement in self-help community development projects

Items	Youth (N=400) Mean	Community Leaders (N=08)				
		SD	Decision	Mean	SD	Decision
They were involved in project planning process.	1.24	0.43	D	1.13	0.35	D
Participate in determining the type of facilities needed for the projects.	1.74	0.56	D	1.88	0.35	D
Making suggestions for improvement.	1.75	0.65	D	1.50	0.53	D
Provision of raw materials.	1.51	0.50	D	1.50	0.53	D
Active supervision of projects so as to achieve desired project objectives.	1.67	0.59	D	1.75	0.46	D
They were involved in assigning responsibilities to themselves and keeping day-to-day records of work, to ensure success of the project.	1.57	0.50	D	1.38	0.52	D

Key: D=Disagree.

Table 2 above shows the areas of youths involvement in self-help community development projects. The respondents disagreed to all the items as evidenced in the mean scores which are at a lower level than the criterion mean of 2.5. Implying that youths involvement in self-help community development projects was low.

Table 3. Mean and standard deviation ratings showing constraints to youths involvement in self-help community development projects

Items	\bar{X}	Community Leaders (N=08)				
		SD	Decision	Mean	SD	Decision
Youths are not given free hand to be actively involved in community development projects.	3.59	0.68	A	3.75	0.83	A
Low educational background of majority of the youths.	3.43	0.64	A	3.38	0.83	A
Lack of commitment of some community leaders to involve the youths leading to out migration of youths.	3.41	0.64	A	3.38	0.72	A
Conflict in the community due to corruption and fund mismanagement.	3.36	0.48	A	3.25	0.69	A
Parents don't allow their children to be involved in community development projects.	3.53	0.64	A	3.50	0.76	A
Lack of clear ideas of what the projects has to offer.	3.38	0.52	A	3.25	0.71	A

Key: A=Agree.

Table 3 above presents the views of the respondents on the constraints to youths involvement in self-help community development projects. From the results both youths and community leaders agreed to all the item statements as the constraints to youth involvement. The mean scores of the groups are greater than the criterion mean of 2.5. Implying that the respondents agreed that the options posed could lead to youths declining from self-help community development projects.

Table 4. T-test analysis of male and female respondents on the self-help community development projects embarked on by communities

Gender	N(Youths)	Mean	SD	T	Df	sig.	Dec
Male	250	3.48	0.16				
				0.477	406	0.634	NS
Female	158	3.47	0.18				

Table 4 above shows that significant value of the Sig 2-tailed test of 0.634 at 406 degree of freedom is greater than 0.05 level of significance; as such the null hypothesis was accepted. Therefore, the null hypothesis which states that there is no significant difference between the mean ratings of male and female respondents on the self-help community development projects was upheld.

Table 5. T-test analysis of Community Leaders (CL) and youths on the constraints to youth's involvement in the self-help community development projects

Gender	N(Youths)	Mean	SD	T	Df	Sig.	Dec
Youths	400	3.4471	.29460				
				.307	406	0.759	NS
CL	8	3.4792	.18767				

Table 5 above shows the significance value of the Sig 2-tailed test of .759 at 406 degree of freedom is greater than 0.05 level of significance, as such the null hypothesis was accepted. Therefore, the null hypothesis which states that there is no significant difference between the mean rating of community leaders and youths on the constraints to youth's involvement in self-help community development projects was upheld.

3. Discussions of the Findings

Findings revealed that communities in the study area Nsukka indeed, embarked on various self-help community development projects such as rural electrification and community health centre projects among others. The populace may have realized that their destinies lie in their hands and as such change in the community can be promoted through cooperative actions instead of waiting endlessly for the government to provide welfare facilities to them which is seemingly not visible with the prevalent economic crisis in the country. This is in line with Agbo (2012) who affirmed that self help community development implies the improvement in the lives of people, through their own efforts and largely to their own benefits. Corroborating with the author's view, Obetta (2014) noted that no single individual or a segment of the community can provide the felt needs of the people, rather the scenario in CD demands a good endeavor and responsibilities which spells out actions made by community members to bring about better economic, social and political conditions of itself. With regard to the issue of fund mismanagement, it has been recognized as a major cog in the wheel to why most projects are abandoned because it will definitely haze the progress of the projects. This in line with Abubakar (1997) who earlier captured the use of widespread corruption and embezzlement of public fund in Nigeria which is very sad as it has negative consequences on the masses wellbeing, the economy, on-going projects and nation: on development which also has effect community development projects at different levels in different communities.

For findings in the areas of youths involvement in self-help development projects, respondents views were unanimous with mean scores lower than 2.5 criterion mean and low extent options in all the six items. The findings were disheartening but not surprising because the youths perhaps have accepted their fate of not been given a free hand in development issues since they are often viewed as problem than a resource. Changing this perception is important if communities could develop new view points, take a bold step and begin to harness the energy and enthusiasm of youths in their community in order to build a more sustained community. The results were not surprising too as captured by Gardner (1997), Onah (2013) who aptly posit, that youths of today hardly believe that any action on their part towards development initiatives will be recognized in the vast processes of their community or society. Their views may be correct, considering the fact that most adults in the community are not even aware that partnering with youths in an on-going development project, will not only facilitate the projects if other inputs are available; but it will give them an opportunity to bridge some personal gaps, develop a sense of ownership, learn to develop new skills and experiences which will enhance individual's potentials to be able to significantly contribute in meaningful ways. From a different perspective, Mark (2010) noted that youths may only be interested to be involved in community development projects when incentives like money and certificate of merit are provided. However, the author warned that money should not be used as an incentive but as a fair and reasonable benefit for doing a job, elsewhere.

Findings revealed a number of constraints to youth involvement in self-help development projects. Respondents agreed to all the item options as constraints. Evidence from the pilot study conducted by the researchers agrees with the findings especially on the issue of youths not given a free hand to be involved in community development projects. Some youths who were brainstormed by the researchers in the communities studied, testified that they were never carried along because their people felt that they are not matured to be involved in solving community problems. This is in line with Hmosillo (2012) who succinctly observed that most community leaders do not see the need for helping youths to begin their early transition from student to adult member of the community and as such adults make decisions for them and exert them over the youths. Definitely, such perception and social exclusion of youths could lead to conflict in communities. Corroborating with the above view, Gardener (1997), Clerk (2010) lamented at what now seem to be youths exclusion in development, whereas historically in the past, youths willingly assumed responsibilities but in recent decades little is asked of them, as such communities lose their youths to out-migration or all forms of restiveness. Supporting the above view, Obetta (2014) believes that giving the youths opportunity to work with their peers through community initiatives may improve the social inclusion of youths. With regard to youths not having clear ideas of what the projects will offer. Agbo (2012) remarked that youths can become effective contributors in their communities but, like adults they can only do so when they are carried along from the onset and given the opportunity. In fact, they are untapped resources needed to build a more sustained community if they are effectively harnessed.

Also, the findings on the focus group discussions that was transcribed by the researchers revealed a unanimous response from discussants who agreed that their communities embarked upon all the projects listed, such as water

boreholes and rural electrification among others, even though they had expected that these projects would have been completed, considering their financial involvement in form of levies placed on every adult and their labor. Concerning the areas of youth involvement in self-help community projects, majority testified that in their communities they have limited pool of human resources because the economic situation in the country has compelled the youths to regularly leave them for urban centers in search for greener pasture. An elderly male discussant chipped in that their youths were not sufficiently involved because on many occasions the youths expected remuneration. From then, they became passive because they rarely involved them and yet they complained that they were not carried along. On the issue of what can be done to ameliorate the incidence of abandoned projects, majority stressed on the need for all of them in their communities including their youths to agree on specific periods in the year set aside for embarking on development projects, perhaps everybody will see it as a commitment and their responsibility. While some expressed that they are poor and as such insisted that the government should come and help them out; their source of livelihood is also being threatened. The views of discussants is in line with the submissions earlier made by Umeh and Odum (2011); Iwuchukwu et al. (2015) stated that youths must no longer be relegated to the margins of the community life so that their energetic, resourceful and innovative nature could be felt. In the same line of reasoning, Udensi et al. (2013) earlier remarked that, the development of communities ought to be seen as a dynamic process involving all segments of the locality including youths who are dynamic force for transformation of rural communities. Understandably, the adults alone cannot bring about multifaceted change desired by community members. Therefore, it is suggestive that all entities including youths as well as the government ought to make important contributions to provide communities welfare facilities.

The findings also revealed that there was no significant difference in the mean ratings of male and female youths on self-help development projects embarked on by the communities studied. This implies that the respondents were unanimous in their responses as evidenced in their mean scores which did not differ in all ramifications. All the mean scores were higher than the criterion mean of 2.5, indicating that communities in Nsukka, LGA of Enugu state actually embarked on self-help development projects. This agrees with Johnson (2012), who testified that self-help community projects hinge on the philosophy of people helping themselves and not just waiting for the government to do the job for them. Such community activities enable people to assume their own responsibilities and claim ownership of their community projects as “theirs”, even though pilot study revealed that there are abandoned projects in the study area. Finally, the findings of the study revealed that there was no significant difference in the mean constraints scores for youths and community leaders which were higher than the criterion mean of 2.5. This implies that respondents agreed to all the constraints posed; implying that such constraints like; youths are not given free hand, low educational background and parents not allowing their children/youths to be involved in SHCPs among others, can have significant impact on self-help development projects and progress of the community. The low educational background of the youths may also apply to their parents hence, they saw nothing wrong with preventing the youths from being involved in SHCPs. It was unbelievable that youths also lacked clear ideas of what the projects have to offer. If such parents and youths are well educated, perhaps they would appreciate the need to be committed to the development of their communities. This is in line with Ngbea (2013) who affirmed that education is primarily concerned with inculcating worthwhile behavior to individuals to make them become useful to themselves, the community and society at large. Equally Nyerere (1979) succinctly submits that education liberates man from the shackles of ignorance, illiteracy, bondage and poverty. This implies that until these youths and parents’ lives are transformed through education, then they will realize that the onus of bringing about change in their communities rests on their shoulders. Therefore, it is believed that in the absence of the constraints revealed in the study, the youths can effectively be harnessed for community development activities, could be more committed and willing to invest their time, energy and talent towards successful execution of development projects in their community.

4. Conclusion

The study examined the self-help projects embarked on by the communities studied, the justification for youth involvement in self-help community development projects were discussed, areas of youths involvement and the constraints to their involvement were also examined. Youths have been identified as important segment of the society and inevitable facilitators of community development projects but any misconception about youths by some stakeholders as not matured, being problems instead of viewing them as resources, could lead to low involvement of youths in CD projects. Constraints to youth involvement in community development projects as revealed in this study include: youths not given free hand to be actively involved in community development projects, low education, parents not allowing their youths to be involved in community development projects, lack of clear ideas of what the projects have to offer and lack of commitment by community leaders to involve the

youths in community development self-help projects. Such constraints could significantly frustrate communities and their development efforts as well as contribute to abandonment of community projects. However, if communities change their negative perception about youths, they can be harnessed, made to feel free and become more active contributors to solving community problems and also help to build a sustained community. Based on these findings, the researchers made the following recommendations that:

- (1) Community development stakeholders should see the youths as an important segment of the populace and future custodian of the community, who should be given opportunity like others, in all aspects of community development efforts such as, in the planning process, implementation, supervision and evaluation of community projects.
- (2) Parents should make the education of their youths a top priority so that they can actively be involved in community development activities, as this will contribute immensely to civic engagement of youths than parental modeling.
- (3) The elders in the community should cooperate and co-exist in a peaceful and friendly environment with youths who are the prospective elders and leaders of tomorrow.
- (4) Government and non-governmental organizations should also assist various communities in their self-help development projects like water borehole project, to enable them improve their standard of living.

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