



Feature

Research

Opinion

Profile

Review

Letters

Submissions

Links

Archive

Subscribe

#### [This article prints out to about four pages.]

### When the Chips Are Down: Problem Gambling in America.

By Rachel A. Volberg. (2001). New York: Century Foundation Press, ISBN: 0-87078-469-2 (paperback). Price: US\$ 14.00.

Reviewed by Henry R. Lesieur, PhD Rhode Island Gambling Treatment Program Rhode Island Hospital Providence, Rhode Island, U.S.A. E-mail: hlesieur@aol.com

The book is divided into six chapters: 1. Introduction; 2. What Is Problem Gambling?; 3. Legal Gambling and the Emergence of Problem Gambling; 4. What is the Extent of Problem Gambling?; 5. Addressing Problem Gambling; 6. The Policy Challenges. The book is written in clear prose and is well organized.

The introductory chapter is brief (actually the kind of thing you see in a preface) but sets the stage for what follows. The second chapter gives a quick overview of definitional issues (in which problem and pathological gambling are spelled out). The medical and harm reduction approaches to problem gambling are then discussed, followed by a review of some of the individual, family, workplace, financial and legal impacts of problem gambling. A brief account of causal theories of problem gambling is made. This is all information that is useful for neophytes unfamiliar with the issues.

The book leaves out youth gambling and a discussion of heavy, non-problematic gamblers. This is a shame as there is some decent research available on both topics. Adolescent gambling has been reviewed by Griffiths and there is an ongoing research program at McGill University worth mentioning. Even a

recommendation to look at Griffiths' and Sue Fisher's works in the U.K. would be informative.

Chapter 3 reviews the evolution and expansion of gambling in the United States. A discussion of opposition forces in the legalization drive and quirks in the American system of legalization (especially with regard to riverboat gambling) is followed by a review of data on the age, gender and ethnicity of gamblers. I found myself wishing that Volberg would speculate beyond the data to explain some of these patterns. For example, blacks are more likely to be weekly gamblers than non-blacks, but less likely to have gambled in the past year. One could speculate that, like patterns of alcohol use and abuse, this may be explained by religious factors. Blacks are more likely to be fundamentalist Christians, thus limiting their overall drinking and gambling. Clearly, further research is needed.

Volberg shifts her discussion to changing patterns of gambling frequency in states she has studied. Her conclusion that people increase their gambling when gambling is legalized and then decrease it over time is quite interesting and worthy of note. In particular, Figure 3.2 needs to be examined carefully by those who assume that legalization inevitably means a steady increase in the extent of gambling. The topic of problem gambling emerges in the last four pages of the chapter, primarily in a discussion of the shift in perspective from gambling as "bad" to a perspective sanctioned by the American Psychiatric Association that defines excessive gambling as "sick" behavior.

In Chapter 4, the reader confronts technical discussions of different measures of problem gambling like the South Oaks Gambling Screen, SOGS-R (for Revised), and the National Opinion Research Center's Diagnostic Screen for gambling problems (NODS). The rate of problem and pathological gambling and whether it is changing over time (Volberg's answer is that the data are mixed), and the relationship of change to the presence of treatment services, are discussed. This chapter also gives an overview of the risk factors for problem gambling in the general population. In this vein, Volberg does not confine her discussion to individual demographic characteristics but also considers the spread of convenience gambling and event frequency as possible contributors to problem gambling. In particular, there are the potential policy implications of the relationship between legalization of electronic gaming devices and increases in problem gambling among women. In this chapter she relies on data from other countries as well as the United States. She notes that data on the "outflow" of pathological gambling is higher than previously acknowledged. In other words, a substantial per cent of individuals classified as pathological gamblers at one point in time are no longer classified as having a problem at a later point in time. However, the number of individuals with intractable problems may increase.

Volberg turns to the issue of addressing problem gambling in Chapter 5. Reading this chapter, it would appear that the casino industry is doing more to raise public awareness of "disordered gambling" (the term the gambling industry prefers) than many state governments. While she points out what is happening in Canada, a more thorough discussion of what has happened in the different Canadian provinces as well as New Zealand and Australia could teach the reader how things could be different if state governments took a more proactive stance. Available treatment is another area addressed. Unfortunately, some of this information is already out of date. For example, Trimeridian no longer operates an inpatient facility. In fact, the failure of different inpatient treatment facilities and the necessity for state funding to support such operations would be a story on its own. Volberg's discussion of treatment evaluations is worth examining. When she turns to research on problem gambling her discussion is narrowly focused on prevalence surveys and funded research. It ignores guite a bit of research conducted outside of those realms. When she comments near the end of the chapter on funding in the U.S. versus Canada and Australia, the paucity of public commitment to addressing the issue in the United States is clear. U.S. funding would have to be increased by 880 per cent (to \$.99 per capita) in order to equal the funding level in Australia.

Volberg winds up the book by outlining the public policy challenges that lie ahead in the United States. She points out the contrast between the lessons of alcohol and tobacco. While not stating it specifically, in Volberg's view, it appears that the gambling industry has learned to take lessons from both, partially because, as she states, gambling, like alcohol, was successfully medicalized (in the United States in any case). However, when it comes to attempts by specific individuals to sue the industry, they have typically failed. Whether tobacco-like legislation would ever be successful is another matter, primarily because, unlike tobacco, many states actively promote gambling.

Her argument that each state should have one regulatory agency to oversee all gambling in the state makes much sense. Instead of having a Lottery Commission, Charitable Gaming Board, Racing Commission and Casino Control Commission, as do many states in the U.S., one agency, a gambling regulatory board would exist. I would add that this agency should have a problem gambling advocate as a member. The board would be able to oversee self-exclusion programs, make sure that fines for violations (either by the gambler or the facility) would go to a problem gambling treatment fund, and would ensure that problem gamblers and their family members were considered in decision-making.

The discussion of the scattered approach taken by different federal agencies is quite telling. There is no coordinating agency at the

federal level in the United States. Volberg calls for a national clearinghouse for information as well as some agency that would coordinate regulatory efforts and provide help to the states. I would call for the involvement of the World Health Organization in setting up uniform standards like those devised for alcohol; an effort to do just that is being championed in New Zealand.

Dr. Volberg's view is clearly that of a sociologist, with both the advantages and drawbacks of that position. While not exhaustive (to do so would require excessive length), the information that is presented is empirically based. There are references for virtually every statement made in the book. Volberg's call for federal involvement, along with her advocacy of a public health perspective that focuses on efforts to keep the social costs down, are features that makes this book a worthy read.

This article was not peer-reviewed. Submitted: March 8, 2003

For correspondence: Henry R. Lesieur, PhD Rhode Island Gambling Treatment Program Rhode Island Hospital 235 Plain Street Providence, RI 02905 U.S.A. Phone: (401) 277-0721

Fax: (401) 277-0744 E-mail: hlesieur@aol.com



intro | feature | research | clinic | case study | service profile | first person account | reviews | opinion | letters

archive | submissions | subscribe | links

Please note that these links will always point to the current issue of *EJGI*. To navigate previous issues, use the sidebar links near the top of the page.

Copyright © 1999-2003 The Centre for Addiction and Mental Health

Editorial Contact: <a href="mailto:phil\_lange@camh.net">phil\_lange@camh.net</a>
Subscribe to our automated announcement list: <a href="mailto:gamble-on@lists.camh.net">gamble-on@lists.camh.net</a>
Unsubscribe: <a href="mailto:gamble-off@lists.camh.net">gamble-off@lists.camh.net</a>





Feature

[This article prints out to about 35 pages.]

Research

Opinion

Profile

Review

Letters

Submissions

Links

Archive

Subscribe

# How to gamble: Information and misinformation in books and other media on gambling

By Nigel Turner Centre for Addiction and Mental Health Toronto, Ontario, Canada E-mail: Nigel\_Turner@camh.net

Barry Fritz Psychology Department Quinnipiac University, Hamden, Connecticut, U.S.A

Bronwyn Mackenzie Centre for Addiction and Mental Health Toronto, Ontario, Canada

#### Abstract

Currently a large number of books, videocassettes and computer programs are available to teach people how to gamble. This article is an examination of this wealth of information. The paper begins by describing the number and types of materials on how to gamble available in an online catalogue and in libraries and bookstores (Study One). The paper then turns the discussion to an examination of the accurate and inaccurate information found in a sample of these materials (Study Two). The studies found that the majority of the material available was on skilled games, but a sizeable number of materials on non-skilled games were also found. The quality of these materials ranged from pure nonsense to accurate. The best materials found were in books on gambling in general and in materials on how to play poker. This paper includes a catalogue of the accurate and inaccurate information found in the books as well as a series of reviews on a number of books, Web sites and other gambling-related material.

**Key words**: gambling, erroneous beliefs, public information

#### Introduction

Currently there are a large number of books, magazines, videocassettes and computer programs available to teach people how to gamble. In addition, many casinos and other gambling venues offer pamphlets that detail the rules of various games. The fact that there are a large number of books and other material available does not mean that gamblers use them. However, given the market economics of the book industry, it is reasonable to suggest that there is a large audience for these materials. Many of these books are written by gamblers, which means that these materials may also help us understand the rich subculture of gamblers. This article is an examination of this wealth of information with the goal of (1) examining the number and type of materials available, (2) determining the quality of the materials based on a small sample of them, and (3) providing therapists and other gambling addiction professionals with a guide for evaluating the gambling information contained in these materials.

Gamblers often hold erroneous beliefs about the nature of gambling and specifically about the nature of random events (Wagenaar, 1988; Griffiths, 1995; Ladouceur, Dube, Giroux, Legendre & Gaudet, 1995; Ladouceur & Dube, 1997). These beliefs are not necessarily invented by the gambler; they may also be learned from other gamblers in the form of shared myths, which circulate around the gambling subculture. Many of these misinformed beliefs appear in books on how to gamble, and consequently, are further validated by virtue of being in print.

Current information on how to gamble includes both accurate and inaccurate information. We believe that some problem gambling could be prevented through the dissemination of accurate information about gambling (e.g. Ferland, Ladouceur & Vitaro, 2002; Ladouceur, Vezina, Jacques & Ferland, 2000). Thus, the general public needs direction and informed advice on which materials most accurately depict fundamental underlying principles of games of chance, to promote informed decision-making. Furthermore, the how-to-gamble literature is quite extensive, suggesting there is a great demand for books and other materials on how to gamble. By evaluating this information, we can perhaps encourage the gambling book industry to produce higher quality books containing accurate information.

We will begin this paper by describing the number and types of current materials on how to gamble available in an online catalogue, and in libraries and bookstores (Study One). We will then turn the discussion to an examination of the accurate and inaccurate information about randomness, probability and emotional control, which appear in a small sample of these materials (Study Two).

#### Study One: Availability and frequency of materials

#### Sample

The frequency of gambling materials presented here is based on a catalogue of material advertised on the Gambler's Book Shop Web site (www.gamblersbook.com), advertised as the largest selection of gambling books, videotapes and software in the world. Our examination of this and other Web sites did not find any evidence to contradict their claim. We also counted the number of books found in libraries and bookstores in the greater Toronto area, but the main focus of the statistics given in this study is from the Gambler's Book Shop Web site.

The catalogue from the Gambler's Book Shop Web site was downloaded during the winter of 2000 and organized into a spreadsheet. It was later sorted by category to create the frequency of materials described in this study. Didactic materials were the focus of this study, and therefore, materials such as novels or casino guidebooks were excluded from the sample. Redundancy was also taken into account in this collection, and repeated items were removed. A total of 1,157 unique items were identified in the resulting collection of materials, which includes books, software, statistics, charts, magazines and videos on gambling. This sample does not represent an exhaustive search of the available literature. We are aware of several specific books that are not listed on this Web site, but to date, this Web site is the most comprehensive list we have come across.

These materials were then classified according to the type of game covered. The games were grouped into three categories: gambling in general, non-skilled (luck) games, and games of skill. Books on gambling in general were mostly books on how to play casino games. Any book that covered a variety of games was classified as a general book. Most game-specific books cover only a single game. There are some published books that cover two games (e.g. lotteries and sports pools). Most often, these materials were placed into the general category, unless we knew that the material predominantly covered just one of the games. A non-skilled game is one in which the only factor that determines the outcome is random chance. Some games of chance do involve choices of how to bet, but these choices do not constitute a real skill. For example in the game of craps, a pass line bet (a bet that the dice shooter will win) always has a lower house edge than field bet (a bet on a specific number). But you do not gradually become better at making pass line bets. You simply make a relatively good bet or a relatively poor

bet. Many of the choices made in non-skilled games have no impact on the long-term outcome of the game whatsoever. Non-skilled games include roulette, craps, slots, baccarat, lotteries and bingo.

A game of skill is defined as a game in which the player's decisions during the game have a direct impact on their chance of winning and long-term success. In poker, for example, a player with a pair of sevens might fold if someone else had already raised the bet; might call if only one bet had been made; but might raise the bet if he or she was the last player to act (place a bet, call or fold) and no one else had raised. The same hand would be played differently depending on how many players were still in the game, the player's position in on the table (e.g. first to make a bet, last to make a bet, etc.), the type of game and his or her experience with the other players. In skill games the best play depends on the situation. What makes these games skill games is the fact that knowing what choice to make in a given situation will alter the player's long-term expected return. Skill games include poker, blackjack, betting on horseraces and sports betting. In these games, a highly skilled player can theoretically earn enough to overcome the house edge (see Turner, 2001, for related comments). Some games such as video poker involve some skills, but the role of skill is usually too small to allow the player to overcome the house edge. Such games are included amongst the skilled games, in a category we called semi-skilled games.

#### Results

The total number of materials was 1,157 items. The bulk of the gambling materials found were books. We found a total of 955 unique books on how to gamble available on the Web site. In addition, several other types of material were also found, including computer software (81 items), magazines (55 items), statistics such as data on horseracing (33 items), audio materials (13 items), video materials (12 items) and charts (8 items).

The largest category of available materials was for skilled and semi-skilled games (e.g. 839 items on sports, horseracing and poker, of which 26 items were on semi-skilled games), and the remainder were evenly split between non-skilled games (e.g. bingo, slots; 159 items), and materials on gambling in general (not game-specific; 159 items). We also looked at the breakdown of gambling books in libraries and bookstores in the greater Toronto area.

#### Skill games

By far, the largest collection of materials found was on games in which winning is affected by the player's skill. A total of 839 items or 70% of all the available materials comprised this category. In order of frequency, these games of skill include sports betting (233 items),

horseracing (220 items), poker (186 items), blackjack (123 items), greyhound racing (51 items), and semi-skilled card games (26 items). The last category, semi-skilled card games, was a mixed collection of games including video poker, Paigow and Let It Ride Poker, each of which was represented by 7 items, and Caribbean Stud Poker, which had 5 items. Each of these games is a variation on poker, played against the casino. These games are semi-skilled because, by using careful play, the player can reduce the house edge, but only to a limited degree. Unlike blackjack, in these games it is not possible to beat the house edge in the long run.

As indicated above, the largest category of skill games materials were on sports betting (233 items). The largest number of items was in the football category. The material included 49 items on making sports bets, 87 on football, 55 on baseball, 37 on basketball, and 5 on hockey.

#### Non-skilled or luck games

Of the 159 items on non-skilled games, 69 materials on how to play craps and other dice games constituted the largest category. Materials on other non-skilled games included roulette (21 items), baccarat (19 items), lottery (17 items), slots (17 items) and keno (16 items).

#### **Discussion**

An examination of the material available on gambling reveals, first, that a large number of books and other materials are available on gambling. Obviously, a large market exists for these materials. Second, the largest number of materials was in the category of books on games of skill. This is not surprising since knowing how to play these games can give a person an edge (to lose less often) compared to other, less skilled players (Turner & Fritz, 2001).

A surprisingly large number of materials are available on playing non-skilled games. This is surprising since a person cannot achieve an edge over the casino in games in which the outcome is completely determined by chance. In some cases, such as craps, learning about the rules of the games might help a person play the game and even decrease their losses (e.g. making pass line rather than field bets), but it is hard to imagine a list of rules filling out an entire book.

The large number of materials on craps and other dice games is perhaps due to the complexity of these games and the fact that the house edge on some of the bets is much lower than on others (e.g. free odds on pass line bets). The complexity and variable house edge in dice games promote a strong illusion of skill, which creates the market for these books. General books on gambling will often

discuss at length how to make free odds bets in craps. The description will often seem to imply that such bets allow the player to beat the house. It is speculated that much of the material on non-skilled games is similarly filled with misinformation about how to beat the house.

As a validity check we also counted the number of general, skill-oriented and chance-oriented materials on gambling in libraries and bookstores in the greater Toronto area. In both libraries and bookstores, skill-oriented books still dominated gambling-related materials, but only made up 41% and 45%, respectively, compared to 87% on the Web site. We suspect that the smaller number of skill-oriented books in libraries and bookstores is related to the less specialized nature of the audience that seeks out material in these venues. Interestingly we found few books on how to bet on sports in either the libraries or the bookstores in the greater Toronto area.

The Web site, library and bookstore samples together give us a picture of the types of gambling books available. Books on games of skill make up the bulk of material available, but information is also available on how to play various non-skilled games. To the serious gambler, the Web site offers mostly books on sports, racing and other skill-oriented games as well as a wealth of statistical information to help punters select their bets. By contrast, the library and bookstore collections have a much larger proportion of books on gambling in general. The general books were most often about casino games.

#### Study Two: A review of specific books

As described above, gambling books come in a variety of forms. Many gamblers read materials on gambling, and a lot of information on gambling is available. Some of the materials are general books, which discuss several games; others focus on a single game. We selected a number of these books and read, viewed or used them. Most of the material was in the form of a book, but one video, one software program, one magazine and four Web sites were also reviewed. The quality of these materials was examined in terms of the accuracy of their information. We first list the types of information and then examine each book to highlight its strengths and weaknesses.

#### Sample and source

A purposive sample of the 18 books and other materials and four Web sites was drawn. The authors collected books that would cover the full range of quality of the materials, from poor to excellent. Thus, the sample is a representation of the range of material available rather than a randomly drawn representation of the

average book available. The books were obtained from several sources, including large chain bookstores, small private bookstores, a discount book clearance centre, used bookstores, libraries and Web sites. The broadest collection of books was found on Web sites and in large bookstore chains. One store had three shelves devoted to gambling books. However, this also varied. In another chain store, only three books were found that were specifically on gambling. Smaller stores and used bookstores had fewer titles available, but those tended to be of a somewhat higher quality. Clearance houses had a mixture of titles, including some of the poorest materials. The libraries had a limited selection of materials, and while most were of relatively high quality, some were quite old.

Many books were examined in the bookstores or libraries, but we selected only a small number that we felt represented the full range of material in terms of quality and game topics.

#### Results

The analysis was completed in a three-stage process. First, we went through the books to examine the information. Specifically, we were looking for examples of accurate and inaccurate information in the books. Second, we gathered these notes together into broad categories, which described the general type of information and misinformation that we found. The list of material was gathered in a bottom-up manner from the source books, which was filtered through our understanding of the nature of probability, randomness and gambling economics. Third, we used our notes to catalogue the type of information found in each book. The information categories are listed below.

#### Information categories

#### Accurate information (see <u>Table 1</u>)

- Rules: How to play the games. The discussion of the rules of play range from one or two lines to complete chapters detailing each possible play and the consequences of each choice. Most of the books have a good description of the rules of the game and how to play it.
- 2. Money management: Several books have detailed descriptions on how to manage money while gambling, others discussed it only briefly. Typically, this material gives rough guides to determining bet size in relationship to the amount of money the player has brought to the game. In some cases, the book describes mathematical rules to determine one's bets. Some of the items discussed budgeting the gaming session in relationship to how much one can afford to lose.

- 3. <u>Probability:</u> Several books have good sections describing the nature of probability. Some do this in the form of a chapter; other have little bits of information scattered throughout the book. The former is most often found in general books, such as the *Idiot's Guide*, and the latter often in books on poker.
- Discouraging myths: Some books have sections discouraging the belief in myths or erroneous beliefs about ways to beat the odds.
- 5. <u>Discouraging problematic systems:</u> Some of the books have good sections warning gamblers about the dangers of systems based on incremental betting. Several books discuss the dangers of the Martingale system in which the players double their bets after a loss. The problem with incremental betting is that it skews the outcome of the play so that most gambling sessions show a profit. This produces an overconfidence in the system so that the gambler quickly escalates the size of their bets. Eventually the player experiences a long losing streak and loses a great deal of money (see Turner, 1998, for further comments on the Martingale system).
- 6. <u>Short term outcomes:</u> Books on poker, especially, warn gamblers not to take short-term trends too seriously. This advice is given both for winning ("Don't get too confident when you win") and losing sessions ("Don't get upset when you lose").
- 7. <u>Emotional control:</u> Some of the books discuss the need to maintain control over one's emotions, but few offer any real advice on how to achieve this.

#### Misinformation errors (see Table 2)

- Misrepresentation of the likely outcome of winning: Many books are called a Winner's Guide or say that the player can beat the odds. Even relatively good materials sometimes claim that they will help the reader beat the odds.
- 2. <u>Frequent or infrequent numbers:</u> Some books encourage the reader to look for frequently or infrequently occurring numbers. This advice is the opposite of discouraging myths.
- Prediction: These materials encourage the belief in predicting the outcome of a game. In the case of skill games, predictions might be accurate information, but in the case of non-skilled games, this is pure misinformation.
- 4. <u>Winning strategies:</u> Describes false winning strategies, including the use of money management as a means of winning in the long term. Many books seem to imply that

- money management techniques can help the player beat the odds. This, of course, is nonsense, but the authors are often careful not to make the claim too explicit. Sometimes the description of the system is so complex that it would be difficult for the average person so see the flaw in the logic.
- 5. Hot streaks or cold streaks: Many books reinforce the idea that there are such things as hot streaks, or hot tables. One book discusses how roulette runs in streaks and how the player can improve his or her chance of winning by following these streaks. In a sense, hot and cold streaks do seem to occur as part of the natural clumpiness of random events. However, the fact is that streaks are simply part of the unpredictable nature of random events and following them cannot help the player win.
- 6. <u>Encourage the belief in luck:</u> Many books either implicitly or explicitly encourage a belief in luck.
- 7. Problematic systems: Some books encourage problematic betting systems such as increasing one's bet after a loss. We have not yet come across any book that encourages the Martingale system a system of doubling bets after a loss and some books explicitly discourage it (see Turner, 1998, for further comments on the Martingale system). However, we have read several books that encourage some version of the d'Alembert system (increasing a bet by one unit after a loss, and decreasing it by one unit after a win) and other incremental betting systems. Several books encourage increasing bets while winning. These systems are not as dangerous as the Martingale system, but can still lead the player into large financial problems.
- 8. Biases: Many books encourage the search for biases. The hallmark of this type of material is that the reader does not need to know why a bias occurred, only how to measure it and track it. Most of the materials that discuss biases do not even address the issue of distinguishing chance from bias. Biased systems are somewhat more difficult to evaluate than other erroneous beliefs because real world biases do exist that make games somewhat predictable. A weighted dice is an example of a real world bias. In fact, unless care is taken to ensure that the dice are perfectly square and balanced, they will show a bias. Dice used in home board games, such as Snakes and Ladders, often have a bias towards the numbers five and six because the numbers are marked on the dice using holes. The side with one hole is heavier than the other sides, and the side with six holes is the lightest side. After 1,000 rolls of an ordinary board game dice, there is a 2% bias in favour of the five and six (unpublished dice rolls conducted by the first and third authors). However, casino dice, roulette

wheels and lottery balls are carefully manufactured to ensure that they do not have a bias, and are tested or maintained to ensure no bias occurs. Nonetheless, biases in many games are possible, so a system that encourages the search for a bias cannot automatically be dismissed as misinformation. However, few of the bias books bring up the issue of finding an apparent bias by pure chance (a type 1 error).

#### Evaluation of the overall quality of each book

After determining the general nature of the information contained in the books and other material, we went through the notes for each book to determine which type of information or misinformation was found in each book. In addition, we coded this material in terms of its overall impact and have determined a rough (quantitative) estimate of the overall quality of the book which we rated using a school-type grading system ranging from excellent "A" to very poor "F." These grades do not reflect whether or not the book tries to prevent problem gambling in any way, only how accurately it discusses gambling. The categories and overall grade score are given in Table 1. Note that these reviews are not exhaustive. It is possible that specific items mentioned might have additional strengths or weaknesses not discussed here.

#### **Brief annotated book reviews**

Table 1
Accuracy of information found in each item and overall score

Books, magazine or video	Overall score	Information	
Stanford and Wong: The Complete Idiot's Guide to Gambling Like a Pro	А	Rules Money management Probability Short term outcomes	yes yes yes yes
D. Ortiz On Casino Gambling	А	Rules Money management Probability Discourages systems	yes
A. Cardoza: How to Win at Gambling	С	Rules Money management Discourages systems	
J.E. Allen:		Rules	yes

Beat the Odds	С	Probability Discourages systems	some some
The Gambler Magazine	С	Rules Discourages systems	yes yes
A.D. Sachar: Winning Strategies for Lotteries and Sports Pools	D	Rules Money management Probability Short term outcomes	some
J. Simpson: Hot Lotto Numbers	F		
C. Gudgeon: Luck of the Draw	С	Rules Probability Debunks myths	yes some some
Professor Jones: The Basics of Winning Lotto/ Lotteries	F		
J. Patrick: John Patrick's Roulette	F	Rules Money management	yes some
R.T. Barhart: Beating the Wheel	D	Rules Probability	yes some
Slots with James Coburn	А	Rules Money management Probability Debunks myths	yes yes yes yes
K. Warren: A Winner's Guide to Texas Hold'em Poker	А	Rules Money management Probability Short term outcomes	yes
Wilson software: Turbo Texas Hold'em [poker]	А	Rules Money management Discourages systems* Short term outcomes	some
Edward O. Thorp: Beat the Dealer	В	Rules Probability	yes yes
J. L. Patterson: Blackjack: A Winner's Handbook	С	Rules Money management	yes yes

Andrew Beyer: The Winning Horseplayer	D	Rules yes Short term outcomes some
John Patrick: John Patrick's Sports Betting	F	Rules yes Money management some Discourages systems some

Note: The overall grade score (i.e. A or B or F, etc.) was determined subjectively but is roughly equivalent to scoring each yes as a 1, each "some" as 0.5, and then using the following formula: percent grade = 50 + 14 \* (total accurate information score) - 6 \* (total misinformation score).

Table 2 Misinformation found in each item

Stanford & Wong: The Complete Idiot's Guide to Gambling Like a Pro  D. Ortiz: On Casino Gambling  A. Cardoza: How to Win at Gambling  Winner's guide! Hot and cold streaks Promotes systems  J. Edward Allen: Beat the Odds  Winner's guide! Hot and cold streaks Luck  Wes Hot and cold streaks Yes Luck  Frequent/infrequent misinformation False winning strategy Hot and cold streaks Yes Winner's guide! Yes Hot and cold streaks Yes  A.D. Sachar: Winning Strategies for Lotteries and Sports Pools  Winner's guide! Prediction Yes False winning strategy Yes Prediction Yes Yes Prediction Yes Yes Prediction Yes	Books, magazine or video	Misinformation	
A. Cardoza: How to Win at Gambling  Winner's guide! Hot and cold streaks Promotes systems  J. Edward Allen: Beat the Odds  Winner's guide! Hot and cold streaks Yes Hot and cold streaks Yes Luck  Frequent/infrequent misinformation False winning strategy Hot and cold streaks Yes  Winner's guide! Yes Hot and cold streaks Yes Luck  Frequent/infrequent Misinformation False winning strategy Hot and cold streaks Yes  A.D. Sachar: Winner's guide! Yes Prediction Yes False winning strategy Yes False winning strategy Yes Promotes systems Yes  J. Simpson: Hot Lotto Numbers  Winner's guide! Yes Winner's guide! Yes	The Complete Idiot's Guide to		
How to Win at Gambling  Hot and cold streaks yes Promotes systems  J. Edward Allen: Beat the Odds  Winner's guide! Hot and cold streaks yes Luck  Winner's guide! Hot and cold streaks yes Luck  Frequent/infrequent misinformation False winning strategy yes Hot and cold streaks yes  A.D. Sachar: Winner's guide! Yes Hot and cold streaks yes  Winner's guide! Prediction yes False winning strategy yes False winning strategy yes False winning strategy yes False winning strategy yes Promotes systems  J. Simpson: Hot Lotto Numbers  Winner's guide! Yes			
J. Edward Allen: Beat the Odds  Winner's guide! Hot and cold streaks Yes Luck  The Gambler Magazine  Frequent/infrequent misinformation False winning strategy Hot and cold streaks Yes  A.D. Sachar: Winner's guide! Yes Prediction Yes Prediction Yes False winning strategy Yes Prediction Yes False winning strategy Yes Promotes systems Yes  J. Simpson: Hot Lotto Numbers  Winner's guide! Yes Yes Yes Vinner's guide! Yes		Winner's guide!	yes
J. Edward Allen: Beat the Odds  Winner's guide! Hot and cold streaks Luck  Yes Luck  The Gambler Magazine  Frequent/infrequent misinformation False winning strategy Hot and cold streaks Yes  A.D. Sachar: Winning Strategies for Lotteries and Sports Pools  Winner's guide! Prediction False winning strategy Prediction False winning strategy Yes Prediction False winning strategy Yes Promotes systems  J. Simpson: Hot Lotto Numbers  Winner's guide! Yes Winner's guide! Yes Yes	How to Will at Gambling		,
Beat the Odds  Hot and cold streaks yes Luck yes  The Gambler Magazine  Frequent/infrequent misinformation False winning strategy yes Hot and cold streaks yes  A.D. Sachar: Winning Strategies for Lotteries and Sports Pools  Winner's guide! Prediction yes False winning strategy yes False winning strategy yes False winning strategy yes Promotes systems yes  J. Simpson: Hot Lotto Numbers  Winner's guide! yes Winner's guide! yes		Promotes systems	yes
The Gambler Magazine  Frequent/infrequent misinformation False winning strategy yes Hot and cold streaks yes  A.D. Sachar: Winning Strategies for Lotteries and Sports Pools  Winner's guide! Prediction yes False winning strategy yes False winning strategy yes Fromotes systems yes  J. Simpson: Hot Lotto Numbers  Winner's guide!  yes  Ves  Winner's guide!  yes  Promotes systems yes		Winner's guide!	yes
The Gambler Magazine  Frequent/infrequent misinformation False winning strategy yes Hot and cold streaks yes  A.D. Sachar: Winning Strategies for Lotteries and Sports Pools  Winner's guide! Prediction yes False winning strategy yes Promotes systems yes  J. Simpson: Hot Lotto Numbers  Winner's guide! yes Promotes systems yes	Beat the Odds		•
A.D. Sachar:  Winning Strategies for Lotteries and Sports Pools  J. Simpson:  Hot lotto Numbers  Misinformation  False winning strategy  Yes  Winner's guide!  Prediction  Yes  Winner's guide!  Yes  Prediction  Yes  Promotes systems  Yes		Luck	yes
A.D. Sachar:  Winning Strategies for Lotteries and Sports Pools  Winning Strategies for Lotteries and Sports Pools  Winner's guide!  Prediction False winning strategy yes Promotes systems  J. Simpson: Hot Lotto Numbers  Winner's guide!  yes  Ves  Winner's guide!  yes	The Gambler Magazine		yes
A.D. Sachar:  Winning Strategies for Lotteries and Sports Pools  Winner's guide!  Prediction  False winning strategy  Promotes systems  yes  J. Simpson:  Hot Lotto Numbers  Winner's guide!  yes  Promotes systems  yes		J	yes
Winning Strategies for Lotteries and Sports Pools  Prediction False winning strategy yes Promotes systems  J. Simpson: Hot Lotto Numbers  Winner's guide!  yes  Prediction False winning strategy yes  Promotes systems  yes		Hot and cold streaks	yes
Sports Pools  False winning strategy yes Promotes systems yes  J. Simpson: Hot Lotto Numbers  Winner's guide! yes		Winner's guide!	yes
False winning strategy yes Promotes systems yes  J. Simpson: Hot Lotto Numbers  Winner's guide! yes			yes
J. Simpson: Winner's guide! yes	, , , , , , , , , , , , , , , , , , , ,	• • • • • • • • • • • • • • • • • • • •	•
Hot Lotto Numbers		Promotes systems	yes
Prediction yes		Winner's guide!	yes
	HOT LOTTO NUMBERS	Prediction	yes

<sup>\*</sup>This game/program actively discourages play that is too loose or aggressive and thus indirectly discourages playing "to get even," and any system that involves chasing.

	False winning strategy Luck	yes yes
C. Gudgeon: Luck of the Draw	Frequent/infrequent misinformation Prediction Luck Biases	some some some
Professor Jones: The Basics of Winning Lotto/ Lotteries	Winner's guide! Frequent/infrequent misinformation False winning strategy Luck Biases	yes yes yes yes
J. Patrick: John Patrick's Roulette	Winner's guide! Hot and cold streaks Promotes systems Biases	yes yes yes yes
R.T. Barhart: Beating the Wheel	Winner's guide! False winning strategy Biases	yes some yes
Slots with James Coburn	Winner's guide! False winning strategy	yes yes
K. Warren: A Winner's Guide to Texas Hold'em Poker	Winner's guide!	yes
Wilson Software: Turbo Texas Hold'em [poker]		
E.O. Thorpe: Beat the Dealer	Winner's guide!	yes
J.L. Patterson: Blackjack: A Winner's Handbook	Winner's guide! False winning strategy Promotes systems Biases	yes some yes some
A. Beyer: The Winning Horseplayer	Winner's guide! False winning strategy Biases	yes yes yes
J. Patrick: John Patrick's Sports Betting	Winner's guide! Frequent/infrequent	yes

misinformation	yes
False winning strategy	yes
Hot and cold streaks	yes
Promotes systems	yes

#### **General books**

General books on gambling tend to have accurate information because they are not really trying to sell a system per se, but are directed towards the novice gambler. They tell the reader how to play more than how to win. However, there is a common tendency of publishers to advertise gambling books as having winning strategies. Even fairly accurate books call themselves "winning strategies." These books should be read with some skepticism, but our experience is that most of these books provide accurate information. The best books in this category have sections on probability, and they debunk myths, discuss money management and explain why players will most likely lose in the long run. We have come across several books in this category, which appear to be excellent resources on gambling in general.

The Complete Idiot's Guide to Gambling Like a Pro by Stanford Wong and Susan Spector (1996) is a good general introduction to gambling. In addition to the rules it has a wealth of good information, including sections on money management, psychology and a glossary of gambling terms. Unlike most books, it does not encourage betting the maximum numbers of coins on slot machines, it encourages betting what one is comfortable with. The authors also provide a good introduction to probability and, in general, provide accurate information to the novice gambler. They also have a good section on the concept of luck, which discourages the reader from taking the idea of luck too seriously. The only objection we have to this book is that the authors jokingly encourage the reader to use slot machines as a way of testing out psychic ability. It would have been better if they had provided a disclaimer that by pure chance, it is often likely that people will appear to have their "psychic ability" confirmed. However, we consider this to be a minor point. Overall, this is an excellent introduction.

On Casino Gambling by Darwin Ortiz (1986) is also one of the better general introductions we have come across. This book has a brief introduction to probability, discourages myths, and has an excellent discussion of betting systems, such as doubling up after a loss, and the financial disaster that can result from following such a system.

How to Win at Gambling by Avery Cardoza (1997) is similar to many other general introduction books on the market: it has extensive sections on how to play blackjack, encourages placing free odds

bets in craps, and then goes on to explain the rules of a smattering of other games. The book focuses on games where the player can affect the outcome, such as blackjack. It has an involved description of craps, encouraging people to place free odds bets. It does mention that even with free odds bets the player is still playing against a house edge, but it also implies that one can beat the edge by combining increased bets while winning and placing free odds bets. On the plus side, though, it has a reasonably extensive discussion of why incremental betting systems are dangerous; however, the warning seemed to be too soft. In terms of misinformation, it encourages increasing bets after a few wins to take advantage of hot streaks. The coverage of how to minimize the house edge in blackjack and craps legitimizes their claim to provide "winning" strategies, but these strategies are not unique secrets and will not allow players to beat the house in the long run. It also suggests that card counting in baccarat is possible even though the general consensus amongst card counting experts is that card counting in baccarat is of little value (Arnold, 1978; Ortiz, 1987).

Another annoying feature is that the book advertises other products by the same publisher. For example, it introduces the idea of card counting and then suggests that the reader who wants more information can purchase another, much more expensive book. A lot of the books on gambling include advertisements for other materials. This book contains a lot of good information about how to play specific games, but is overall a mediocre book on gambling. It is somewhat hard to follow and poorly organized.

Beat the Odds: How to Win at Gambling by J. Edward Allen (1993) is fairly similar to Cardoza's book in format but is considerably shorter. Like Cardoza's book, it has a lot of ads for other expensive books and courses. Also like Cardoza, Allen encourages taking free odds bets in craps. The most notable difference from the other book is the extensive set of instructions for playing video poker at a minimum house edge. While the book encourages money management and not betting beyond ones means, when it comes to video poker it throws away those cautions and encourages betting the maximum number of coins. However, to be fair to Allen, we should point out that the house edge is much lower in video poker if the player makes the maximum bet.

This book has instances in which it reinforces the idea of luck. On the plus side, it does discourage betting systems; however, again on the negative side, some of its advice is nonsense. For example, near the end it tells the reader to "Leave a winner if possible. A small win is better than any loss. You can't go wrong leaving a winner, remember that. Let's win."

The Gambler is a magazine available for free at numerous casinos in Ontario. Other jurisdictions have similar free publications. This

magazine contains both accurate and inaccurate information. For example, an article on poker identified different types of poker players and gave strategy suggestions for each type (Steinberg, 2000). An article on blackjack (Tamburin, 2000) listed the effect of various rules on the house edge. Meanwhile, an article on slots (Mitchell, 2000) encouraged progressive slot players to play when the jackpot is big because the "mathematical odds" are that it will hit soon. The same article went on to encourage smart players to play after the tourists had finished priming the machines (e.g. from 2 to 4 am, or on Mondays). Thus, this magazine provides a mixture of good information and myths.

Overall most of the general materials on gambling appear to be reasonably accurate descriptions on how to gamble. However, as indicated above, some resources are better than others. Three other general books on gambling that we would recommend are *What Are the Odds?* (Orkin, 1999), *The New Gambler's Bible* (Reber, 1996) and *Gambling for Dummies* (Harroch, Krieger & Reber, 2001). These, however, have not been included in the tables due to space limitations.

#### Material on non-skill games: Lotteries

Winning Strategies for Lotteries and Sports Pools by A.D. Sachar (1992) is a curious blend of nonsense and truth. On the one hand, the book tells the reader how to determine if you have a talent for predicting lottery numbers. On the other hand, it discusses expected return, debunks some myths about numbers that are "due" to come up, tells the reader how to keep records to accurately judge success, discourages excessive spending, warns the reader about short-term fluctuations in chance, and so on. We give it a passing grade since it might actually do some good to people who find out they do not have predictive ability. Of course, those who figure out that they have a "luck" ability (see pp. 31—35) might be in real trouble.

Hot Lotto Numbers by Jean Simpson (1987) applies numerology to picking lucky lottery numbers and includes many charts. This book contains a short (12-page) description of the system, and the rest of the book is taken up with numerous charts and tables. The system is essentially a way of generating erratic or random-looking numbers to bet on. As a number generation process the system accomplishes its goal, but the numbers are more spaced out than true random numbers. The book promotes the myth that some numbers are lucky or hot and that it is possible to mathematically predict winning numbers. Reading it one almost gets the sense that the author was writing it as a joke.

Luck of the Draw by C. Gudgeon (1995) is not a book on how to play per se, but a factual account of how various people's lives have

been affected by large lottery wins. Along the way, it does, however, give a number of tips on playing from the various winners mentioned in the book. In general, many of the stories describe relatively positive outcomes, but the book also describes a number of people that spent their way through the money or were hit by a series of other tragic events after the lottery win.

While some of the information on lotteries is accurate, the book also makes erroneous claims. For example, at one point it says that the player is better buying two tickets for one lottery than two tickets for two different lottery draws, which is not true. In both cases, the player has two chances of winning and it does not matter at all if those two chances are for the same draw or for different draws. It also feeds into the myth that systems that use past numbers or systems that use a wheel approach for placing bets (a systematic approach to covering as many numbers as possible) may increase one's chance of winning. While the book does not advocate these systems, it does little to discourage them. The book does correct some erroneous beliefs, but encourages others. This book is worth reading since it provides a lot of insight into the lives of lottery players; however, as an advice book it receives a score of C. This book has been recently revised and expanded.

The Basics of Winning Lotto/Lotteries by Professor Jones (1994) offers sheer nonsense. The first part tells the reader how to search for biases in the numbers that come up. A diagram is given illustrating how differential drag might cause biases. However, the author states that the player does not need to know the how or why of biases, but only needs to measure them and profit from them. The second chapter tells people how to keep track of numbers that are due to come up. Logically, the benefit of keeping track of infrequent numbers and the benefit of keeping track of frequent numbers should cancel out — which, of course, they do. But Prof. Jones will never be wrong technically; odds are that if a number has not come up recently either it will not come up, supporting the "bias" theory, or it will come up, supporting the "due to come up" theory. As a result, the book will never be wrong, but at no point will the player be able to win by following this system (except by chance).

#### Material on other non-skilled games

John Patrick's Roulette by John Patrick (1996) is mostly nonsense about trends. Patrick has created a large number of books and videotapes on gambling and conducts seminars on how to gamble. Much of the system is based on the belief that if red is showing it will keep showing, and so on. The book also passes off money management as the key to beating the house. In addition, the book's tone is rather patronizing; at times even insulting

Beating the Wheel by Russell T. Barnhart (1992) is the most

sophisticated of the bias systems books we read. Unlike the other books that cover biases (Jones, 1994; Beyer, 1994), this book does discuss the physics behind why biases occur (e.g. faulty maintenance, poor design, tampering). It also stresses the importance of long-term observations to detect biases. Biased wheels almost certainly do exist, but making money from them may be much more difficult than the book implies. According to the book, if a wheel has a bias, a player should be able to detect it after 800 observations (several hours watching a specific wheel). Even the author admits that after 800 spins the bettor has a 20% chance that the bias is merely a type 1 error (finding a bias that is really only a random chance fluctuation). That's an expensive margin of error. Our own simulations have shown that to detect a weak bias would require as many as 4,000 observations.

The book is interesting as a historical account of biased wheel systems and criminal scams to cheat the wheel, but it is likely to lead most readers down the garden path into the realm of the type 1 error. The cover claims that the system was used to win over \$6 million. However, it turns out that most of these wins were the result of various criminal conspiracies. For example, one syndicate in Europe rigged wheels by replacing the screw holding the frets that separate numbers on the wheel with a smaller one so that the frets would be loose. When the ball hit a loose fret, it would bounce less, causing the ball to slow down and thus creating a bias for that part of the wheel. Today frets with screws are no longer in use. In addition, electronic sensors record every roll of the wheel so that the casino would most likely detect a bias (real or type 1 error) before the player would have a chance to profit from it. Thus, bias systems are really a thing of the past (Ortiz, 1986).

Winning Strategies: Slots with Video Poker (Scoblete, 1997), a video tape frequently advertised on television, is actually quite a good slots video. James Coburn hosts the introduction to the video: Frank Scoblete narrates the rest of the video. It discourages myths, tells the reader how the machines work and encourages money management. It encourages betting max coin (the maximum bet permitted), but also stresses the importance of figuring out what one can afford to bet. Our only real complaint about this video is that it is advertised as a guide to winning, but it really only tells the reader how to avoid losing too much. We suspect that a lot of people who purchase this video will be upset upon realizing that it does not actually tell them how to win. As with many materials on gambling, it contains a plug for another product: a video on how to play video poker. Some parts of this video, such as the section on myths, would be good for clients in treatment for problem gambling, but caution is advised in that the video is intended to promote slot play, not to prevent it. (See Turner, 2001, for a more extensive review of this video.)

#### Material on skill-oriented games: Poker

Most of the information we have seen in books on how to play poker is quite accurate. Poker books often talk about the short-term vagaries of chance. For example, a book might warn the reader how sometimes they will see someone win a hand with a poor starting set of cards (a 2 and a 4 unsuited), while someone else with a pair of aces might be beaten. Such events do happen, but the player is discouraged from changing their strategy when such an event occurs. They encourage the good player to be patient because over the long term, skill will produce success.

We have not yet seen a bad book on how to play poker. However, these books usually do not accurately describe the difficulty of becoming a professional card player but make it seem as if poker is a realistic way of making money.

A Winner's Guide to Texas Hold'em Poker by Ken Warren (1996) is a comprehensive description of how to play Texas hold'em poker, one of the most common versions of poker found in casinos. It contains a wealth of information about the chances of winning the pot given one's cards and the bets of other players. It does not have a section on probability, but scattered throughout are references to probability. For example, on pages 48 and 49, the author writes: "It is likely that you will go through long periods of not getting a playable hand.... Don't get discouraged. It's normal and you should not let it affect your decisions. The important thing to remember is that your goal is not to play hands of poker, but to make the best decisions."

Tables on the chances of winning with various combinations of cards are provided at the back of the book. Practical suggestions are given for virtually any hand. Generally, the reader is encouraged to play conservatively and wait for good cards, but to play aggressively when he or she has good cards.

Turbo Texas Hold'em by Wilson Software (1997) is an elaborate computer program designed to teach how to play hold'em poker. In addition to basic game play, the program provides extensive statistics on playing style, including how loose or aggressive the user plays against the computer opponents. The opponents in this game are not random, but have programmed profiles about how they should react to a large number of specific poker situations. The profiles are designed to match the types of players one might meet around the average poker table, with names that are amusing and relevant. The game comes with 40 pre-designed profiles. Player profiles vary from tight (folds most hands) to loose (stays in most hands) and from passive (checks or calls, but rarely bets or raises) to aggressive (bets or raises). The user can select their opponents to practice playing against specific types of players such as loose-

and-aggressive players or tight-and-passive players to learn how to counter these styles. The user can also create custom profiles for the opposing players. The program provides an incredible wealth of information on strategies and probabilities. A player that thinks he or she is as good as the best might get a wake-up call with this tool. The program does not deal with the emotional side of gambling, but overall is an excellent way to learn how to play hold'em poker.

Because one of the authors (BF) is an avid poker player, we have included a few additional references on that game, which were not included in Table 2. Some poker books are written for serious players of a specific form of poker, such as *Seven Card Stud for Advanced Players* by Sklansky, Malmuth and Zee (1991). In contrast, Steiner's (1996) *Thursday Night Poker* is intended for casual recreational players. Caro's (1986) *Poker for Women* describes how women can gain an edge over men in poker by taking advantage of male players' tendency to underestimate female opponents, or gentlemanly courtesy towards female opponents. The book is directed towards novice players. *Poker for Dummies* by Harroch and Kreiger (2000) is oriented toward the novice player who might be beginning to play in public card rooms. This book covers the most common forms of poker dealt in a casino (i.e. seven card stud, hold-em, Omaha, etc.).

These books contain valuable information for novice players or for players seeking to improve their skill. Statistical reasoning, bluffing, money management and reading opponents are discussed. Presumably, poker skills can be improved through reading and practice. *Poker for Dummies* is an excellent book for counsellors seeking to learn more about the game and today's poker scene. Clients in treatment for gambling problems, however, should be cautioned that most poker books underestimate the difficulty of becoming a professional player. Players who succeed financially are statistically rare, and those who earn more than a minimum wage are rarer still (Hayano, 1982). Success at poker requires emotional control and discipline, in addition to knowledge about the game. Little information on how to obtain or maintain emotional control is found in these books.

#### Material on skill-oriented games: Blackjack

Beat the Dealer by E.O. Thorpe (1966) is a great book, a classic; it is a must read for any historian on gambling. Not only fun to read, the book has a lot of carefully considered mathematically-based rules for playing blackjack. Thorpe first describes in detail the basic system for blackjack and the computer simulations used to compute the optimal system for play. He then goes on to describe modification to the basic strategy depending on the cards that have been drawn previously (card counting). The book is out of date in that a lot of the rules of blackjack no longer apply — they were

changed because of this book. However, it is still an interesting book.

Blackjack: A Winner's Handbook by J.L. Patterson (1990) has a lot of good material in it, including a bibliography on blackjack; various card systems; money management; and drills to learn card counting. It is also the only book we have seen that gives concrete advice on how to attain and maintain emotional control. Patterson also discusses how to play in the modern casino where card counting is no longer always possible. One of the clear messages from the book is that card counting is not an easy way to make money.

On the down side, this book discusses the search for table biases as a result of like-card clumping, and the advice is a lot like other books that discuss biases. The validity of his claim regarding likecard clumping is difficult to evaluate. On the one hand, shuffling, as he says, is not an efficient randomization process, but clumpiness is also a common occurrence in the normal nature of random events (Gould, 1991). Patterson might be underestimating how clumpy randomness is supposed to be. But the solution to the clumpiness problem, shuffle tracking, is logical and might work whether or not cards are showing a bias or merely showing random variation. In shuffle tracking, the player first card counts to determine if a section of cards in the deck is favourable to the player (more high cards than low cards) or unfavourable to the player (more low cards than high cards). Then, while the cards are being shuffled for the next session, he or she keeps track of the clumps of player-favourable cards counted in the previous session, and bets more during the player-favourable clumps. This system should theoretically produce an advantage to the player.

Some of his other suggestions are definitely based on misconceptions about random numbers. For example, his Takedown strategy is a system of incremental betting that promotes the illusion that a mathematical system for bet size could somehow provide the player with an edge. Although the book includes some misinformation, overall, it appears to be worth reading, especially for its discussion on discipline and self-control.

#### Material on other skill-oriented games

The Winning Horseplayer by Andrew Beyer (1994) includes both extremes — some good advice and some poor advice. In the 1970s and 1980s, Beyer popularized speed handicapping, a method for adjusting performance figures to determine the true speed of a horse. However, since most people now use speed handicapping (due in part to Beyer's book on this technique), adjusted speed is no longer a sure way to make money. This book deals with trip handicapping in which the punter adjusts the speed figures for a horse to take into account the actual circumstances of previous

races. For example, if a horse was boxed in (one horse right in front of him and another beside him) during the early part of the race, but went on to come in third, its overall speed is an underestimate of its actual ability. If other bettors were not aware of this fact, the payout odds for that horse might be high enough to overcome the house edge. Trip handicapping is likely to be an effective means of finding underrated horses to bet on. But the system requires a lot of observation and is thus really only practical for people that spend day after day at the races.

On the plus side, the book includes a step-by-step guide on how to read the daily racing form. On the negative side, the section on tracking biases may be pure nonsense. The discussion of biases was written in the same manner as Prof. Jones's lottery book and even used similar words about not needing to know how the bias occurred. According to the book, sometimes a track will have a bias in favour of the outer part of the track, while at other times, a bias in favour of the inside track. Biases are determined by looking for unusual events such as horses that run on the outside winning more often than usual. Since both inner and outer track biases occur, it is likely that both biases are merely observations of normal random events. However, as with roulette, we can not rule out the possibility that an actual track bias might occur due to the firmness of the track or a recent rainfall. The manner in which Beyers describes the biases mysteriously emerging for a short period of time and then disappearing again suggests that these biases are type 1 errors random chance events. Interestingly, since speed handicapping does work and would provide important information, it is unlikely that the player would ever notice if biases were not contributing anything to the system. However, the problem with trip handicapping is that it normalizes the obsessive study of the track and the progress of the race.

John Patrick's Sports Betting (1996) is similar to his book on roulette. It is patronizing and filled with his own theories about trends. Like the books promoting biases (Beyer, 1994; Jones, 1994), he argues that one does not need to know why a trend occurs. For example, he says: "In sports betting, as in every other betting endeavor, trends dominate. Why? I dunno. I haven't got a clue as to why they dominate, but they do" (p. 9).

Wood (1992) has demonstrated that trends and streaks in sports games occur no more often than is expected taking into account the underlying ability by team and random chance. Trends per se, have no predictive power. Ironically, the belief in streaks may sometimes open up betting opportunities for astute handicappers to bet against the streak (Paulson, 1994). As in his roulette book, Patrick (1996) is careful to describe his theory of trends in such a way that his theory will always make a correct prediction. Not only does he advocate the occurrence of winning streaks, he also makes it clear that the

opposite streak could occur at any minute (see the story of Ben. A. Loser, p. 10). The same point is made above about Professor Jones's book. His theory can never be proven wrong through experience because the two opposite outcomes are always predicted.

Interestingly, Patrick (1990) explicitly rejects the idea of handicapping sports games and the value of team statistics (p. 4). On the plus side, the book does emphasize money management and not betting more than one can afford. The book does discourage doubling after a loss and ridicules the idea of luck. In terms of information, the book discusses the various types of bets available and the pros and cons of each, but we found his explanation of how to read the line rather hard to follow. On the negative side, he encourages incremental bets while winning. He also presents his theory of regression betting — not reinvesting all of the money that was won, but keeping some of it — as if it were a way of making money in the long term. This book is the only skill-oriented book we reviewed that we have given a failing grade.

#### Web sites

In recent years, a growing amount of information on gambling has become available on Web sites. Some sites are game specific, while many others offer information on a wide range of games. Some sites offer good information (www.wizardofodds.com), others offer a mixed quality of information (www.clubchance.com), and others offer mostly inaccurate information (www.lotterysoftware.com). All of these sites, good or bad, either contain advertisements for online casinos and other gambling venues, or are trying to sell some product that is supposed to improve ones chance of winning. In many of the mediocre Web sites one has to hunt around for accurate information amongst the advertisements and product promotions. One site, www.professionalgambler.com, offers a service selling statistical information to serious sports gamblers to help them place their bets. However, it also includes a tongue-incheek section on 10 ways to throw away money in sports betting in which it discourages poor betting strategies such as increasing bets to make up for losses and other harmful systems of play. We do not have the expertise to evaluate the legitimacy of their statistical information, but the information related to responsible gambling is unusually good.

The best Web site we have found so far is the Wizard of Odds site (www. wizardofodds.com). This site includes a question-and-answer section for topics that are not covered by the Web site. This site also includes an annotated bibliography of books on gambling.

Information and ratings of the online sites can be found in <u>Table 3</u> and <u>Table 4</u>.

Table 3: Accuracy of information found on Web sites

Web sites	Overall score	Information
www.wizardofodds.com	А	Rules yes Money management Probability yes Debunks myths yes Discourages systems Short term outcomes yes
www.clubchance.com	С	Rules yes Money management  Debunks myths  yes
www.professionalgambler.com	В	Rules yes Money management yes Debunks myths yes Discourages systems yes
www.lotterysoftware.com	F	Rules yes

Table 4: Misinformation found on Web sites

Web sites	Misinformation
www.wizardofodds.com	
www.clubchance.com	Winner's guide! yes Hot and cold streaks yes Luck yes Promotes systems some
www.professionalgambler.com	Winner's guide! yes

	Prediction	yes
www.lotterysoftware.com	Winner's guide! Frequent/infrequent misinformation Prediction False winning strategy Promotes systems Biases	yes yes yes yes yes yes yes

#### General discussion

An examination of the material available on gambling reveals, first, that a large number of books and other materials are available on gambling. The majority of these items are on games of skill. The relative percentage of different materials varied in each of the three sources we examined. Both the libraries and the bookstores included more general items on gambling, while the Web site catalogue of resources was heavily geared towards skill-oriented games. It is likely that more books exist on specific skill games, but that the market for general books on gambling is larger. The on-line catalogue reflects the numbers of titles available on skill games, but the audience for many of these materials is rather small.

Detailed examination of the materials revealed a few important facts. First, there are good books on how to gamble that accurately portray the nature of randomness and the chances of winning. There are also a lot of poor quality books available; some filled with misinformation or myths that encourage the reader to make bad decisions.

Most of the books reviewed have some combination of accurate and inaccurate information. One important implication is that public information on gambling and problem gambling should include information about good and bad sources of information on gambling. Professionals in the field of problem gambling need to somehow inform the public about the misinformation present in some books. This paper is a start in that direction. However, monitoring the quality of books on gambling would be an enormous task. The greatest difficulty in accomplishing this goal would be in the area of skill-oriented games. Systems for card games are relatively easy to evaluate because it is easy to compute the probability of drawing each specific type of hand. Computer simulations of these systems can be time-consuming, but usually yield precise answers. However, a book that offers a system of handicapping in some sport (horseracing, football, etc.) may or may not be providing accurate information to their readers. The validity of the system can only be determined with extensive research and computer simulations. Our

interest in this field is in protecting consumers from misinformation; however, not in evaluating the relative merits of one type of handicapping over another. A more modest goal might be the publication of a list of recommended and not recommended sources of information on gambling.

The results indicate that a lot of written material on how to gamble is on the market. Some of this information is good, some of it potentially quite harmful. A persistent observation through this research process was the staggering number of publications on how to "win." Even fairly good books describe themselves as offering "winning strategies." This is not surprising; it is hard to imagine people buying a book on "how to lose." Unfortunately, this likely presents a barrier to getting good information out to the public. We suspect that would-be gamblers are more likely to read something entitled "How to win" than something entitled "How not to lose too much." Can truth compete with lies in an open market? Is it possible to encourage the publishing industry to publish books that are more accurate?

In addition, we found few materials that cover the topic of emotional control or the psychology of gambling. Perhaps professionals in the treatment and prevention fields could create self-help guides to staying in control geared towards the audience of people that read the books on how to gamble.

The data provided in this paper actually underestimates the total number of materials that the gambler can draw on. We did not count materials specifically on sports games, but only those that were marketed as gambling materials. Bookstores often have several shelves of material available on sports games. These books include materials on how to play, how to coach games, statistics on teams or biographies of players and coaches. Gamblers may read such material in the hopes of improving their betting strategy. We also did not count the number of materials on investments because of the difficulty in separating sound investing from gambling. One of the bookstores we visited had over 800 books available on investing and finance. The task of monitoring the quality of investment advice would be a much greater challenge than the task of monitoring gambling materials.

#### Reference list of books reviewed

Allen, J.E. (1993).

Beat the Odds. New York: Cardoza Publishing.

Barnhart, R.T. (1992).

Beating the Wheel: Winning Strategies at Roulette. New York: Carol Publishing Group.

#### Beyer, A. (1994).

The Winning Horseplayer: An Advanced Approach to Thoroughbred Handicapping and Betting. Boston: Houghton Mifflin.

#### Cardoza, A. (1997).

How to Win at Gambling. New York: Cardoza Publishing.

#### Caro, M. (1986).

Poker for Women. Hollywood: Gambling Times Inc.

#### Gudgeon, C. (1995).

Luck of the Draw: True-Life Tales of Lotteries and Their Winners. Scarborough, ON: Prentice Hall.

#### Harroch, R.D. & Kreiger, L. (2000).

Poker for Dummies. Foster City, CA: IDG Books, World Wider Inc.

#### Harroch, R.D., Krieger, L. & Reber, A. (2001).

Gambling For Dummies. New York: John Wiley & Sons.

#### Hayano, D.M. (1982).

Poker Faces: The Life and Work of Professional Players. Berkeley, CA: University of California Press.

#### Jones, P. (1994).

The Basics of Winning Lotto/Lottery. New York: Cardoza Publishing.

#### Mitchell, G. (2000).

The Gambler, 2, 14–15.

#### Ortiz, D. (1986).

On Casino Gambling. New York: Dodd, Mead & Company.

#### Orkin, M. (2000).

What are the Odds? Chance in Everyday Life. New York: W.H. Freeman and Company.

#### Patrick, J. (1996).

John Patrick's Roulette: A Pro's Guide to Managing Your Money and Beating the Wheel. New York: Carol Publishing Group.

#### Patrick, J. (1996).

John Patrick's Sports Betting: Proven Winning Systems for Football, Basketball and Baseball. Secaucus, N.J.: Carol Publishing Group.

#### Patterson, J.L. (1990).

Blackjack: A Winner's Handbook. New York: Perigee Books.

#### Reber, A.S. (1996)

The New Gambler's Bible: How to Beat the Casinos, the Track, Your Bookie, and Your Buddies. NY: Crown Publishers.

#### Sachar, A.D. (1992).

Winning Strategies for Lotteries and Sports Pools. New York: Shapolsky Publishers.

#### Scoblete, F. (1997).

Winning Strategies: Slots with Video Poker. Markham, ON: Promo Vision Marketing Corporation.

#### Simpson, J. (1987).

Hot Lotto Numbers. New York: Crown Publishers.

#### Sklansky, D., Malmuth, M. & Zee, R. (1991).

Seven Card Stud for Advanced Players. Las Vegas, NV: Two Plus Two Publishing.

#### Steinberg, B. (2000).

The Gambler, 2, 10-11.

#### Steiner, P. (1996).

Thursday Night Poker. New York: Random House.

#### Tamburin, H. (2000).

The Gambler, 2, 16–17.

#### Thorpe, E.O. (1966).

Beat the Dealer: A Winning Strategy for the Game of Twenty-One (2nd ed.). New York: Vintage Books.

#### Warren, K. (1996).

A Winner's Guide to Texas Hold'em Poker. New York: Cardoza Publishing.

#### Wilson Software. (1997).

*Turbo Texas Hold'em, Vol. 1.* Information available at www.wilsonsw.com/tthwin1.html

#### Wong, S. & Spector, S. (1996).

The Complete Idiot's Guide to Gambling Like a Pro. New York: Alpha Books.

#### References

#### Arnold, P. (1978).

The Encyclopedia of Gambling: The Games, the Odds, the Techniques, the People and Places, the Myths and History. Glasgow: Collins Publishers.

#### Ferland, F., Ladouceur, R. & Vitaro, F. (2002).

Prevention of problem gambling: Modifying misconceptions and increasing knowledge. *Journal of Gambling Studies*, *18*, 19–29.

#### Gould, S.J. (1991).

Bully for Brontosaurus: Reflections in Natural History (1st ed.). New York: Norton.

#### Griffiths, M. (1995).

Adolescent Gambling. London: Routledge.

#### Ladouceur, R. & Dube, D. (1997).

Erroneous perceptions in generating random sequences: Identification and strength of a basic misconception in gambling behavior. *Swiss Journal of Psychology*, *56*, 256–259.

## Ladouceur, R., Dube, D., Giroux, I., Legendre, N. & Gaudet, C. (1995).

Cognitive biases in gambling: American roulette and 6/49 lottery. *Journal of Social Behavior & Personality, 10* (2), 473–479.

## Ladouceur, R., Vezina, L., Jacques, C. & Ferland, F. (2000). Does a brochure about pathological gambling provide new information? *Journal of Gambling Studies*, *16*, 103–107.

#### Paulson, R.A. (1994).

A comment on the misperception of streaks. *Journal of Gambling Studies*, *10*, 199–205.

#### Turner, N.E. (1998).

Doubling vs. constant bets as strategies for gambling. *Journal of Gambling Studies*, *14*, 413–429.

#### Turner, N.E. (2001).

Slots with James Coburn: A review. *The Electronic Journal of Gambling Issues: eGambling* [On-line serial], *5.* Available: www.camh.net/egambling/issue5/review/index.html#video

#### Turner, N.E. & Fritz, B. (2001).

The effect of skilled gamblers on the success of less skilled gamblers. *The Electronic Journal of Gambling Issues:* eGambling [On-line serial], 5. Available: www.camh.net/egambling/issue5/research/index.html

#### Wagenaar, W.A. (1988).

Paradoxes of Gambling Behaviour. London: Lawrence Erlbaum Associates.

#### Wood, G. (1992).

Predicting outcomes: Sports and stocks. Journal of Gambling

Studies, 8, 201-222.

**Acknowledgements**: We would like to acknowledge the help of Warren Spence and Masood Zengeneh for the time they spent travelling to bookstores and libraries and editing drafts of this manuscript.

**Disclaimer**: The ideas expressed in this paper are those of the authors and not necessarily the opinions of the Centre for Addiction and Mental Health or Quinnipiac University.

This article was peer-reviewed.

Submitted: October 11, 2002. All URLs cited were active when

submitted.

Accepted: July 28, 2003.

For correspondence:
Nigel Turner, PhD
Centre for Addiction and Mental Health
33 Russell St.
Toronto, Ontario, Canada M5S 2S1
E-mail: Nigel\_Turner@camh.net
Phone: (416) 535 8501 ext. 6063
Fax (416) 595 6899

Nigel Turner received his doctorate in cognitive psychology from the University of Western Ontario in 1995. He has worked at Centre for Addiction and Mental Health for the past five years where he has developed psychometric tools to measure addiction processes. He is currently focused on understanding the mental processes related to gambling addiction. He has extensive experience in various research methods including psychometrics, surveys, experimental studies, computer simulations, interviews and focus groups. He has published several papers in peer-reviewed journals, and he has made numerous conference presentations.

Barry Fritz is a professor of psychology at Quinnipiac University, Hamden, Connecticut. He is a member of the board of the Connecticut Council on Problem Gambling. He graduated with a BA from the University of Vermont, an MA from Connecticut College, and a PhD from Yeshiva University. "My current research interests are focused on understanding the motivation to gamble and those factors which differentiate between problem gamblers and recreational gamblers. I enjoy the game of poker and hope that my research will keep me on the recreational side of the table."

Bronwyn MacKenzie is research analyst in the depression clinic at

the Centre for Addiction and Mental Health. Bronwyn completed an honours B.A. in psychology at York University (Toronto) and has completed the graduate certificate programme in pathological gambling from the Virginia Commonwealth University. She has coauthored numerous conference papers, proceedings, and reports in the area of gambling and alcohol policy. She is first author of a chapter on the privatization of retail alcohol in Alberta to be released in the spring of 2004 by McGill-Queen's University Press. She has also written over 30 articles in popular Canadian magazines. She is a member of the peer review board of eCOMMUNITY: International Journal of Mental Health and Addiction and a board member of the Toronto Adult Student Association.



intro | feature | research | clinic | case study | service profile | first person account | reviews | opinion | letters

archive | submissions | subscribe | links

Please note that these links will always point to the current issue of *EJGI*. To navigate previous issues, use the sidebar links near the top of the page.

Copyright © 1999-2003 The Centre for Addiction and Mental Health

Editorial Contact: <a href="mailto:phil\_lange@camh.net">phil\_lange@camh.net</a>
Subscribe to our automated announcement list: <a href="mailto:gamble-on@lists.camh.net">gamble-on@lists.camh.net</a>
Unsubscribe: <a href="mailto:gamble-off@lists.camh.net">gamble-off@lists.camh.net</a>