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ONLINE ASSISTANCE FOR PROBLEM GAMBLERS: 
AN EXAMINATION OF PARTICIPANT CHARACTERISTICS 
AND THE ROLE OF STIGMA 

Gerald Anthony Cooper, Doctor of Education. 2001 
Department of Adult Education. 
Community Development and Counselling Psychology, 
Ontario Institute for Studies in Education of the 
University of Toronto 

ABSTRACT 

This study is among the first to examine Internet-based help for individuals with gambling problems. It is a natural extension of a growing literature which suggests that many are benefiting from online support groups. Data were derived from 50 individuals who responded to either broad or direct invitations to participate. Participants were recruited from GAweb, an internationally popular online support group for problem gamblers. Results were analyzed both quantitatively and qualitatively. Since much has been written about how the traditional treatment and self-help systems have only succeeded in helping a small percentage of those in need and that many report significant obstacles to obtaining assistance, the data were examined with these issues in mind. 

Seventy percent of the sample were found to have previously avoided attendance at face-to-face programs because of a variety of concerns related to stigma. Those who experienced the greatest degree of stigma tended to be individuals who had not received any care, other than GAweb. Exposure to GAweb, was associated with a greater likelihood of participation in a future program of recovery. Most participants reported that the ability to secretly lurk at GAweb contributed to the likelihood that they would disclose personal information. Very few differences between men’s and women’s utilization of GAweb were found despite that fact that women were much newer to GAweb than men.

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These findings led to the development of the Pathways Disclosure Model, which helps to explain why online assistance may be of particular utility to problem gamblers who are in a precontemplative stage of change. This model suggests that ongoing help for problem gamblers is more likely after visiting an online self-help group because individuals have complete control over the disclosure process. As a result, problem gamblers have a unique opportunity to secretly sample the helping process; this in turn, leads to a greater degree of comfort and an increased willingness to participate more actively. While the immediacy of the Internet helps to explain the initial attraction, it is the safety of absolute anonymity which likely explains the sustainability of this form of recovery. Implications of this model are discussed.
ACKNOWLEDGEMENTS

Many people played important roles in helping me conduct this study. Firstly, I am indebted to the many men and women of GAweb who shared their lives with me through their postings; especially, those who volunteered their time and energy to participate in this study. Next, is Tony L., the administrator of GAweb who was very generous in allowing me to post notes of solicitation at GAweb and to review utilization files for the site. Without Tony’s keen foresight, there would not have been a GAweb and without GAweb, this story could not be told.

I wish to thank my thesis committee members at OISE/UT: Dr. Howard Cappell, Dr. Tahany Gadalla, Dr. Gila Hanna and Dr. Irving Rootman for all of their suggestions. I especially want to thank my Supervisor, Dr. Jack Quarter for all of his support, encouragement, advice and good judgement: once again, without Jack’s help, this study would likely not have taken place.

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ONLINE ASSISTANCE FOR PROBLEM GAMBLERS:
AN EXAMINATION OF PARTICIPANT CHARACTERISTICS
AND THE ROLE OF STIGMA

Chapter 1 - INTRODUCTION

Problem Statement

The purpose of this study was to examine problem gamblers' use of computer-mediated communication (CMC) as a facet of their recovery. In particular, I wanted to explore whether an online social support group known as GAweb provided benefits to problem gamblers who visited the website, similar to the advantages reported in the scientific literature regarding other health concerns. I was also interested in understanding the reasons for these beneficial effects.

The issue of how to effectively help individuals with gambling problems is especially important at this time, because of the increasing prevalence rates of these problems. Since there is a paucity of information concerning problem gamblers' use of the Internet for recovery purposes, it is anticipated that this study will contribute important new knowledge to help inform future efforts in assisting those seeking help with such problems.

Four research questions have been developed based on a review of the literature. Their connection to this literature will be more fully articulated in Chapter 6, but they are identified below in order to illustrate the specific research objectives of this study:

1. When problem gamblers who utilize an Internet support group avoid face-to-face treatment programs and/or self-help groups, is it because they fear being stigmatized?

2. Does the amount of exposure to an Internet support group make it more likely that the problem gambler will participate in a program of recovery?

3. Does 'lurking' at an online support group increase the probability of disclosure of gambling problems?
4. Are demographic characteristics associated with the issues being addressed in this study: the role of stigma in the avoidance of face-to-face approaches, the relationship between online assistance and participation in a program of recovery, the relationship between lurking and disclosure?

**Thesis Overview**

This thesis consists of the following sections and chapters:

- a *rationale* for the above-mentioned thesis problem (including a statement of why this topic is of interest to me), justification for the exploratory nature of this study, and the need for such an expansive literature review;

- a *literature review* which includes specific chapters on:
  
  1) the increasing prevalence of problems associated with various forms of gambling, including a brief discussion of special-needs populations:
  
  2) gambling and generic treatment research (which considered issues of access to the addiction treatment system and related challenges in addressing these problems) and the reasons why problem gamblers might benefit from improved access to an online form of assistance - for example, a social support group:
  
  3) the phenomenal development of computer-mediated communication (CMC). and in particular, the use of Internet-based (online) support groups\(^1\) in the treatment of various health problems;
  
  5) a discussion of stigma and, in particular, how stigmatized individuals expend a

---

\(^{1}\) Also loosely known by a variety of names including: ‘listservs’, discussion groups, ‘usegroups’, ‘USENET’. chat rooms, bulletin boards, mailing lists, news groups, and so forth.
great deal of energy in the concealment and disclosure of personal information; potential advantages of CMC will be discussed in terms of an emerging model of how disclosure can be staged:

- a chapter which summarizes the implications of the literature and which led to the research questions and methodology of this thesis; and

- specific chapters regarding the study results and the corresponding discussion and conclusions (including an articulation of a model to better understand why CMC may assist problem gamblers in their efforts at rehabilitation).

Rationale for the Thesis Problem, Exploratory Nature and Expansive Literature Review

The rationale for this thesis is as follows: since the availability of various games of chance in Canada has increased sharply since 1969, so too have problems associated with gambling (Ladouceur, Jacques, Ferland and Giroux, 1999; Shaffer, Hall and Vander Bilt, 1999). This trend shows no signs of abatement; some have speculated that this is due to the growing governmental dependence upon revenues derived from gambling-related activities (Derevensky and Gupta, 2000). Increasing gambling problems in many communities have been accompanied either by a general lack of treatment service or these services have been plagued by issues of poor access and/or underutilization (see for example: Rush and Shaw Moxam, 2000; Toneatto, Hodgins, Turner, Cunningham, Koski-Jannes and Adams, 2000). The growing body of literature which describes the successful use of online support groups for a variety of other health problems led me to assume that such groups may also be of help to individuals seeking to resolve their gambling problems.

Unfortunately, there is a lack of published accounts of how problem gamblers are utilizing
online support groups as part of their recovery. To be sure, the literature regarding any form of online support for any health problem is in its infancy, even though reports of using computers to assist with patients' education (Bartlett as cited in Lambert and Vieweg, 1990), and specifically in a CMC format (Zimmerman, 1987), date back to the 1980s. The absence of empirically-based information about this subject justified the exploratory nature of this study. Exploratory studies are important because they help new lines of enquiry gain recognition and acceptance in the academic community (Sobell, Ellingstad and Sobell, 2000) and provide a framework for better understanding client and program attributes which can impact upon the change process in addictions (Schober and Annis, 1996). It is anticipated that this study will lead to the development of new knowledge which can become the basis of confirmatory studies in the future.

One objective of this study is to develop a model that can guide subsequent research of problem gamblers utilizing online support.

Since this is an area of study which is a) quite unique and b) incorporates some rather diverse themes (for example: gambling problems, treatment and recovery issues, computer-based communities and the topic of stigma), it was deemed important to thoroughly review the background literature. For this reason, I purposefully decided to make the literature review section as inclusive as possible and to address issues such as:

- the historical antecedents which have led to the current situation;
- the extent of the problem at the present time and some projections about what might be anticipated in the future;
- an examination of those who have been considered to be at greatest risk for experiencing gambling problems; and
- the factors which have and will likely continue to influence the increasing nature of
gambling problems throughout the world.

Wherever possible, I have attempted to present information specific to Ontario and Canada.

In order to better appreciate the potential contribution of online assistance, I strongly believe that it is necessary to have an understanding of these issues. It would have been possible to much more efficiently summarize this material; however, doing so might have been at the expense of understanding the magnitude of the problems and their impact on individuals such as the participants in this study.

For those who either already have a good understanding of these background issues or who are not as interested in such contextual detail, it is suggested that they proceed directly to Chapter 6, which outlines this study’s research questions and describes how they were developed from the preceding literature review.

Why This Topic is of Interest to Me

I am employed as a Program Director at the Centre for Addiction and Mental Health (CAMH - formerly the Addiction Research Foundation) in Sudbury, Ontario. I have worked in the addictions and mental health fields for almost 25 years; first as a clinician, and since 1984 in roles which encompass community development, planning and education. Prior to my professional career, personal experiences such as growing up in a single-parent, socially-assisted environment in Southern Ontario led me to believe strongly in the power of self-determination, self-efficacy and peer support.

These values would later come to have a significant impact upon my professional career. For example, the presence of a strong belief in people's ability to improve their life if provided nurturing, respectful and supportive environments eventually led me to advocate for such clinical
innovations as brief-treatment interventions and the use of unobtrusive modes of assistance (for example: Cooper, 1996; Malla and Cooper, 1985; Malla, Rush, Gavin and Cooper, 1985; Sanchez-Craig, Davila and Cooper, 1996). I had the good fortune of meeting men and women who were able to make fundamental changes in their lives, such that their substance abuse was discontinued, largely because they were able to discover in themselves natural healing properties. In other words, it is not uncommon that specialist interventions often play a relatively minor role in the recoveries of individuals with substance abuse problems.

I frequently found myself questioning the appropriateness and effectiveness of several approaches to client care including diagnostic labelling, unrestricted use of invasive treatments (like extended stay/residential care) and dogmatic counselling stances ("I know what’s best for you because I’m the trained professional"). I wondered if such approaches have only served to further stigmatize persons with addictions, thereby making it increasingly difficult for them to obtain either specialist or peer assistance.

More recently my OISE/UT studies have drawn my attention to the potentially powerful effects of CMC. The synthesis of CMC with my professional interest in addictions and mental health, have sparked my curiosity about the reasons that persons with addictions are turning to online services. Given the phenomenal recent growth in the gambling arena and the scarcity of research related to online assistance, I have decided to focus on this particular issue.

I am neither a gambler, nor an abstainer (for example, I purchase periodic lottery tickets and make occasional visits to the horse races or casino). I feel that the negative side to gambling is a very important area for adult education to embrace so as to better enable our society to cope with gambling’s consequences (which I believe, we have yet to fully experience). Through this thesis, I hope to contribute a new perspective which will advocate for helpful and minimally
intrusive interventions for persons with gambling problems and their significant others. As I approach this endeavour, I am cognizant of my non-problem gambling background and associated values.

* * *

This chapter has identified the problem and research questions being addressed in this thesis, provided a justification for same and an outline of what is to follow. In the next chapter, the issue of problem gambling will be explored in detail with attention being paid to its historical origins, the current situation and likely directions it will take in the future.
Chapter 2 - GAMBLING AND GAMBLING PROBLEMS: AN OVERVIEW

Chapter 2 examines the growing phenomena of gambling-related problems in detail. In order to better understand why this is happening, it will be important to define what is meant by the term 'problem gambler'. I will outline some of the more salient historical developments which have contributed to the current state of affairs and which will likely remain operable for some time to come. This chapter will also briefly discuss the issue of vulnerabilities and consider which groups in our society might be more likely to get into trouble with gambling. The importance of public opinion and social policy will also be examined, given their critical role in shaping community norms concerning gambling.

Defining Problem Gambling

Gambling has been described as “the act of risking or betting something of value on an event in which the outcome is uncertain” (Andres and Hawkeye, 1997, page 553). There are strong cognitive elements which lead to one’s problematic gambling behaviour, and which serve to reinforce it (Ladouceur, Sylvain, Letarte, Giroux and Jacques, 1998). Gamblers frequently make incorrect conclusions about their ability to control the odds, a cognitive process also known as “gamblers fallacy” (Epstein, 1998, page 16).

According to the National Council of Welfare (1996), gambling covers a wide array of activities including:

Local casinos, resort casinos, raffle tickets, fund-raising events such as casino nights, Lotto 6/49, scratch and win games, video poker or other video card games, arcade video games where money is at stake, electronic bingo, traditional paper bingo, horse races at the track, horse races away from the track, other animal events (such as dog races or cock fights), cards where money is at stake, cards in a card room, craps or other dice games where money is at stake, sports with friends or co-workers where money is at stake, sports pools, sports action lottery games, sports with a bookmaker, pull-tabs or Nevada break-opens, speculative investments, and games of skill (such as billiards, darts, and golf) where money is at stake (National Council of Welfare, 1996, Section II, paragraph 4).
In each of these cases, the basis of the behaviour is the “inherent unpredictability of gambling events either through inadequate information, as in sports betting, or through the incorporation of randomness as in slot machines, casino games, and lotteries” (Ladouceur et al., 1998, page 1116).

Where games of chance are found, there will usually be more losers than winners. While many terms are used to describe those who play and lose too often, the most frequently used clinical terms are ‘compulsive’ and ‘pathological’ gambling. The Canadian Centre on Substance Abuse has used these terms interchangeably with “problem gambling”, which it defines as:

A progressive disorder characterized by a continuous or periodic loss of control over gambling; a preoccupation with gambling and with obtaining money with which to gamble; irrational thinking; and a continuation of the behaviour despite adverse consequences (National Working Group on Addictions Policy. 1998. paragraph 6).

Lesieur (1998) is not quite as accommodating with the terminology; he calls attention to the need for a common understanding in how these terms are used. In comparing the terminology for problem gamblers and problem drinkers, he states:

Not all problem drinkers are alcoholics, and not all substance abusers are drug addicts. However, all alcoholics are problem drinkers, and all drug addicts are substance abusers. Consequently, with respect to the term “problem gambler”, it is recognized that not all problem gamblers are pathological gamblers, but all pathological gamblers are problem gamblers (page 154).

It is important to understand the context of these definitions: that is, the study of gambling problems is a relatively new one. Even though gambling itself goes back to the earliest of human records\(^2\), and that efforts to control it date back as far as 321 B.C. where a regulatory commission

\(^2\) For example, Preston and colleagues (1998, page 187) state that “an early version of the shell game is seen on the wall of an Egyptian burial vault from 2500 B.C. Recent excavations in London uncovered the remains of a 2000 B.C. dice game. Ancient Hebrews, Chinese, Japanese, Germans, Romans, and Greeks all left evidence of gambling.”
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for gambling existed in India (Preston et al., 1998), as recently as 50 years ago gambling was not perceived as a major social problem. For example, Frey (1998) states that when a special issue of the scientific journal *Annals* was devoted to gambling in 1950, "There was not much interest in the topic for either the academic community or public officials" (page 8). In fact, it was just in 1980 that the American Psychiatric Association formally recognized that "pathological gambling" was a mental disorder (a disorder of impulse control) in its influential *Statistical Manual of Mental and Nervous Disorders* (Lesieur and Rosenthal, 1991; Ladouceur et al., 1994). The first in-patient treatment program for pathological gamblers had begun just eight years earlier by Dr. Robert Custer in Brecksville, Ohio (Korn and Shaffer, 1999; Weisbrodt, 1991). The forerunner to the *Journal of Gambling Studies* (the *Journal of Gambling Behavior*) was begun in 1985, and in the early 1990s the U.S. National Council of Problem Gambling changed its name to reflect the emerging concept of *problem gambling* (Lesieur and Rosenthal, 1991).

To be consistent with much of the literature, the term "problem gambling" is used throughout this dissertation. However, the use of the term should not be interpreted as downplaying the pathological aspects of uncontrolled gambling. Clinically speaking, the definitive statement on the nature of this disorder comes from the *Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition (DSM-IV)*, published by the American Psychiatric Association (1994). There, the placement of "Pathological Gambling" falls under the section entitled "Impulse-Control Disorders Not Elsewhere Classified". The formal definition of pathological

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1 Other forms of control can be found throughout the ages. For example, in 1388, King Richard II of England was said to have prohibited his archers from playing games involving dice in an effort to maximize their productivity (Canadian Broadcasting Corporation, 1999) and in 1699, lotteries were outlawed by William III (Preston et al., 1998).

2 The first in its influential series of DSM diagnostic taxonomies: the gold standard of psychiatric diagnosis criterion in North American psychiatry.
gambling in the DSM-IV is as follows:

**Diagnostic criteria for 312.31 Pathological Gambling**

A. Persistent and recurrent maladaptive gambling behavior as indicated by five (or more) of the following:

1. is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)
2. needs to gamble with increasing amounts of money in order to achieve the desired excitement
3. has repeated unsuccessful efforts to control, cut back, or stop gambling
4. is restless or irritable when attempting to cut down or stop gambling
5. gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)
6. after losing money gambling, often returns another day to get even ("chasing" one's losses)
7. lies to family members, therapist, or others to conceal the extent of involvement with gambling
8. has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling
9. has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling
10. relies on others to provide money to relieve a desperate financial situation caused by gambling

B. The gambling behavior is not better accounted for by a Manic Episode (American Psychiatric Association, 1994, page 618).

Although it is generally thought that there is no singular aetiological explanation for problem gambling, the following risk factors have been identified as likely determinants: the presence of other behavioural problems, having parents who are problem gamblers, an early age of onset of gambling-related problems and availability of gambling (National Gambling Impact Study Commission, 1999). Frequently, such risk factors are closely interwoven making it difficult to precisely discern their relative degree of risk (Aday, 1993).

**Gambling Becomes Normative Behaviour**

According to the National Council of Welfare, "In less than a generation, gambling has
become a multi-billion dollar industry in Canada. No one knows for sure how much people bet, but legal forms of gambling probably add up to between $20 billion and $27 billion a year” in Canada (National Council of Welfare, 1996, Section I, paragraph 1). The average Canadian household gambles some $1,200 annually; double that of comparable American households (Nicol and Nolen, 1998). Moreover, it has been estimated that some $80 billion a year is bet illegally through sports bookies in North America (Grange, 1998).

In Canada, 88 percent of adults report having gambled at least once in their lifetime (Casino Gambling in Canada, 1998). In 1996, significantly more Canadians reported having gambled in the past year than in 1989 (63 versus 54 percent) and between these two time periods, the rate of pathological gambling increased 75 percent (Ladouceur et al., 1999). In their meta-analysis of 134 prevalence estimates (26.1 percent were from Canadian studies), Shaffer, Hall and Vander Bilt (1999) found evidence “supporting the notion that the prevalence of gambling disorders among adults in the general population increased between 1974 and 1997” (page 1372); typically, these lifetime rates were between one and two percent for adults and closer to four percent for adolescents (Ibid). It has been estimated that as many as 1.2 million Canadians are estimated to have gambling problems (National Council of Welfare, 1996).

Fundamental changes to Canadian policies on gambling began in 1969\(^5\) with amendments to the Criminal Code of Canada. This meant that exceptions to the ban on gambling could be granted to groups who sought to hold lotteries for "the public good" (General Council, United Church of Canada, 1998). The Loto-Canada draws sponsored by the Federal Government followed in the 1970s, attracting many new players with big payouts. Provincial and territorial governments eventually persuaded their Federal counterparts to include them in the "windfall": as a result, by 1996, the Federal government reaped $50.3 million as well as an additional $70 million in general sales tax (GST) revenues from sundry lottery corporations (Campbell and Smith, 1998).

**Lotteries**

Lotteries have generally experienced tremendous growth over the past two decades: ticket sales in the U.S. rose from $2.17 billion in 1982 to $14.13 billion in 1994 (Gupta and Derevensky, 1996). In Canada, revenues went as high as $2.8 billion in 1994 and then declined slightly until the most recent reporting period in 1998 (Marshall, 2000). In terms of the overall percentage of gambling revenues to the government, lotteries have declined from 90 percent in 1992 to 35 percent in 1998; this is due to the rapid increase in video lottery terminal (VLTs) and casino availability in Canada during this same time period (Ibid).

**Casinos**

Canada's first casino was opened in 1989 in Winnipeg. In Ontario, the first such casino

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\(^5\)Prior to 1969, gambling was strictly prohibited in Canada. This prohibition dated back to the birth of the Criminal Code in 1892. In 1900, the Supreme Court of Canada ruled that gambling should be governed by criminal law and hence under the purview of the Federal Government (General Council, United Church of Canada, 1998).
opened in 1994, in Windsor; soon afterwards, similar ventures commenced in the First Nation community of Rama (just north of Toronto) and Niagara Falls. From April 1, 1999 to March 31, 2000, there were over 21 million patron visits to these three casinos resulting in over $2 billion in total gross revenue (Ontario Lottery and Gaming Corporation, 2000). To date, there are over 50 permanent casinos in seven provinces (Korn, 2000); they have recently surpassed VLTs and lotteries as the largest generator of gambling revenue in the country (Marshall. 2000). Canada is home to approximately 21,000 slot machines, 38,000 VLTs, 20,000 annual bingo events and 44 permanent horse race tracks (Korn, 2000). Canadian casino gross revenues (on a per player basis) have ranged from $25.53 (Sheraton Casino Sydney) to $114 (Casino Windsor) (Casino Gambling in Canada, 1998; Perrier Mandal and Vander Doelen, 1999). To illustrate just how profitable these ventures are, the following excerpt describes Casino Windsor:

With 3,000 slot machines and 135 ‘live’ tables, this is Canada’s largest casino, and also the richest, with gross gambling revenues approaching $1 billion a year. It quadruples the average Las Vegas casino in terms of performance; in fact, it has the highest casino revenues per square foot on Earth (Hutchinson, 1999).

**Video Lottery Terminals (VLTs)**

A specific form of gambling which appears to be particularly addictive is the video lottery terminal. These machines, also referred to by some as “devil’s television” (Nicol and Nolen, 1998, page 48), are similar to the traditional slot machines found in casinos (‘one armed bandits’), but they have several critical differences: they are much faster to play, they are often located in bars and other community-based non-casino sites (even corner stores where minors have easier access to them), and they pay winners in ‘credits’, which can only be converted to cash at another location within the establishment (as opposed to getting the machine itself to immediately pay the
remaining credits in cash). A study from Alberta (Wynne, Smith and Volberg, 1994) suggests that on average, problem gamblers are likely to spend more than $380 per month on VLTs (Canadian Broadcasting Corporation, 1998). Not surprisingly, “VLTs are far and away the most lucrative source of gambling revenue... [and] are becoming the game of choice for gambling addicts” (Campbell and Smith, 1998, pages. 29-30).

VLTs are also quite commonly referred to as the “crack cocaine” of gambling. They are banned by all but seven U.S. states (General Council, The United Church of Canada, 1998) and have received a considerable amount of media exposure. Such close and increasing public scrutiny may help explain why the Chair of Ontario’s Management Board cancelled plans to introduce about 20,000 VLTs in April, 1998⁶ (Ontario Government, 1998), and why Albertans only narrowly voted to retain them in that province⁷ (Mahoney, Mitchell and Fraser, 1998). With the exception of Ontario, British Columbia and the Territories, VLTs have been found in the remainder of the country, having first been introduced to the Atlantic provinces in 1990. Interestingly enough, most of the 4,000 callers in 1997 to Nova Scotia’s problem gambling telephone hotline were apparently seeking help for a VLT addiction (Finlay and Budd, 1998).

**Internet Gambling**

As overwhelming as these figures are, they only tell part of the overall story of gambling’s impact in the ‘information age’. It is interesting to note that even though the earlier mentioned definition of gambling behaviours (National Council of Welfare, 1996) is comprehensive and

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⁶The Government of Ontario instead opted to replace VLTs with slot machines at charity casinos and race tracks (not taverns/restaurants or communities that did not want them), despite an absence of research about the relative qualities (for example, addictiveness) of slot machines versus VLTs.

⁷For example, Edmonton, Alberta voted 50.15 percent in favour, and 49.85 percent against keeping VLTs.
relatively current, it nevertheless failed to include Internet-based gaming; a sign of just how new this phenomena is. Internet gambling is a very lucrative industry with huge potential for growth. One Canadian-run “virtual casino”, which opened for business on September 1, 1998, reportedly earned $1.56 million in revenue in its first 45 days of operation (Grange, 1998). Sports wagering via the Internet is thought to be even more popular: it has been estimated by the U.S. Justice Department that $600 million was illegally wagered in 1997 (Ibid). According to the U.S. National Coalition Against Legalized Gambling, the “ABCs” of Internet gambling have been described as “Addiction, Bankruptcy and Crime” in that it “would multiply addiction exponentially by making highly addictive forms of gambling easily accessible to everyone” (General Council. The United Church of Canada, 1998. page 11).

As of June, 2000, there were an estimated 332.7 million people worldwide with access to the Internet, including roughly 147.5 million North Americans (Nua Internet Surveys, 2000a, 2000b). A comparable estimate from 1996 had just 20-25 million users globally (Shaffer, 1996).

With this kind of growth on the Internet, it is not surprising that many new forms of online entertainment have arrived, including many virtual gaming sites which can be easily found via online search engines. The first virtual online casino started in August, 1995, and has received over 7,000,000 visits per month (Janower, 1996). By 1996, there were at least 452 gambling-related sites on the Internet (Ibid), and by 2000, this number had grown to over 700 according to USA Today (BehavioralHealthOnline.com, 2000). Bets can be as low as a nickel (Janower, 1996) and, in some cases, there are free casino games which offer cash prizes (Pogo.com: Online

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8 Respectively, a 109 and 67 percent increase in just the past 15 months (statistics from March, 1999 indicated that the numbers were 159 and 88.33 million people). It has also been estimated that one in four Canadian households (2.68 million) connected to the Internet from home in 1998 (an increase of 44 percent over the year before - Carey, 1999) and that this has recently increased to 48 percent (Dixon, 2000).

Online advertisements for various gambling sites can be found throughout the Internet, often at more benign sites like online newspapers, magazines and search-engine home pages. This makes it easy for young children to be enticed to visit a gambling site when they are 'surfing the Net' on their own. Even though most sites indicate that they are for adults only, regulating age restrictions is almost impossible (McGuigan, 1998; Shaffer, 1996).

There is a growing concern that Internet-based gambling might lead to an increased number of problem gamblers, not just because of the expansion of gambling availability (expected to generate $10 billion U.S. in revenue by the end of this year [McGuigan, 1998]), but also because when delivered online, gambling is more enticing. According to Griffiths (1996): "These new technologies may provide many people with their first exposure to the world of gambling and could be argued to be more enticing than previous non-technological incarnations" (page 473). Morahan-Martin (1998) cites a personal communication from gambling researcher Cummings who thinks instantaneous feedback via the Internet accounts for its appeal. The concern about Internet gambling has led to some restrictive legislation. For instance, in the United States, at least three bills have moved through Congress with the support of some rather unusual political alliances: "Heavy gambling states New Jersey and Nevada support the ban, as do major league sports, Ralph Nader, the NCAA, and the Christian Coalition" (From the Hill, 1998, paragraph 1). Even if these bills are passed into legislation, their enforcement would be far from assured since Internet gambling defies regulation (Epstein, 1998; Frey, 1998; Janower, 1996).

Shaffer suggests that it would be simplistic to merely think of Internet-based gambling as

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9 In discussing online casinos, McGuigan comments: "Not only are these sites impressive, but it is clear that improvements are being made at a very rapid rate which will permit the Internet casino operator to give a very 'casino like' experience" (1998, page 113).
the cause of the problem:

It is the relationship of the addicted person with the object of their excessive behaviour that defines addiction.... addiction is not the product of a substance, game or technology, though each of these things has the capacity to influence human experience. Experience is the currency of addiction.... Consequently, the causes of addiction are multifactorial. (Shaffer, 1996, pages 465-6).

**Availability and Problem Prevalence**

In the substance abuse field, a rich literature has consistently supported the notion that increasing availability of a given substance will result in a corresponding increase in rates of associated problems. According to the former Addiction Research Foundation (a World Health Organization collaborating agency): “Research shows that when alcohol is made more available, consumption increases. We also know that when overall consumption rises, so does the number of people who experience alcohol-related problems” (Addiction Research Foundation, 1993, paragraph 11). This well-established theory is also thought to play a role with other addictions including gambling (Grun and McKeigue, 2000; Henriksson, 1996; Lesieur, 1998; Shaffer et al., 1999). For example, in New Zealand, following the opening of a casino in Auckland, researchers found that calls to a telephone gambling hotline increased significantly in the six months after the casino’s opening as compared to the six months prior to its operation (Problem gambling hotline callers, 1998). In Canada, as gambling became more prominent throughout the past decade, a corresponding increase in average annual adult gambling expenditures has been noted in every province and territory except British Columbia (Marshall, 2000)\(^{10}\).

The Centre for Addiction and Mental Health conducted an interesting study where they

\(^{10}\) Interestingly, British Columbia, the Yukon and the Northwest Territories had the lowest per capita expenditures (respectively $140 and $90), largely due to the fact that casinos and VLTs were not permitted in these areas.
investigated the effects on the local community of the large casino in Niagara Falls (which opened in late 1996). To do this, they surveyed an adult cohort either “before or around the time of the opening” and one year later (Room, Turner and Ialomiteanu, 1998, page 3). Among other things, they found that the rate of those reporting non-charity casino gambling increased significantly from about one in ten to about one in two, and that the numbers who reported gambling problems also increased. The study also found that individuals reporting personal problems went from 2.5 to 4.4 percent; those who reported a family member’s problem increased from five to 7.5 percent; and respondents who reported a friend’s problem went from 14 to 20.5 percent (Ibid). According to Maclean’s magazine, Niagara Falls’ crime rate increased 10 percent after the casino opened and violent crimes rose 11 percent even though the region’s overall crime rate decreased (Nicol and Nolen, 1998). The issue of a relationship between gambling and criminality has also been found elsewhere (for example, Spunt, Dupont, Lesieur, Liberty and Hunt, 1998); another American study found that gambling activities were associated with specific crimes such as robbery and motor vehicle thefts (Lester, 1998).

It should be noted that not all studies have found a relationship between gambling availability and increased problems. For example, after one year of Casino Windsor’s presence, Govoni, Frish, Rupcich and Getty (1998) found that rates of problem and pathological gambling were unchanged from prior to the casino’s opening. However, their methodology involved random telephone surveys of metropolitan Windsor residents and it has been estimated that between 75 to 85 percent of the patrons at Casino Windsor come from the United States, which was not part of the survey (Perrier Mandal and Vander Doelen, 1999).

One of the more interesting studies is also one of the most recent to be published. Cox, Kwong, Michaud and Enns (2000) conducted a household survey of Winnipeg area adults (age 18
years and older) and found that 2.6 percent met the criteria (SOGS ≥5) for a lifetime prevalence of probable pathological gambling (to date, the highest rate in Canada); another three percent satisfied the problem gambling criteria (SOGS = 3 or 4). These high prevalence rates are all the more interesting noting the liberal attitudes towards gambling in Manitoba: Winnipeg is home to Canada’s first permanent casino (opened in 1989), two more have since been opened and Manitoba has a very high per capita concentration of VLTs - three times greater than Quebec which has the greatest number of the machines in Canada at about 12,500 (Ibid).

In summary, the theory which ties the level of problems associated with gambling behaviour to its availability thus appears to be supported both empirically and anecdotally, even if the evidence of this relationship is not always consistent or as extensive as it is with other addictive behaviours (like alcohol abuse).

**Special-Needs Populations**

In its comprehensive review entitled “Gambling in Canada”, the National Council of Welfare makes ten recommendations including one regarding special-needs populations. According to the report: “In addition to general prevention and treatment programs, provincial and territorial governments should have special programs tailored to particular groups of high-risk gamblers” (National Council of Welfare. 1996. Section VI, paragraph 18). These special-needs populations are generally thought to include youth, women, Aboriginal people and individuals who experience concurrent substance abuse and mental illness\(^{11}\) (Crockford and el-Guebaly. 1998; Lesieur and Rosenthal, 1991; Littman-Sharp and Jain. 2000).

\(^{11}\) Others have also called attention to seniors and various ethnic groups (for example, Asians) as important groups to consider as ‘special-needs’ (for instance: Nicol and Nolen, 1998).
It is frequently mentioned that many problem gamblers do not get the help they require (for example, see Hodgins and el-Guebaly, 2000; Ladouceur et al., 1999). This is particularly true for special-needs populations who may have their own unique reasons why they do not seek help from others. In this regard, it is important to keep in mind that the aforementioned special-needs groups are thought to have higher rates of problem gambling than the general public.

According to Shaffer, Hall and Vander Bilt (1999): “Adolescent samples consistently show a significantly higher prevalence of level-3 and level-2 gambling for both lifetime and past-year time frames than general adult population samples” (page 1371). Generally, rates of adolescents’ gambling problems have been reported around four percent but have also been found to be as high as seven percent (Stinchfield and Winters, 1998); this is in stark contrast to adult pathological gambling rates which have been reported between one and 2.5 percent (Ladouceur et al., 1999).

These higher rates are likely due to the increased exposure young people have to gambling opportunities (Stinchfield and Winters, 1998). Many are beginning to gamble at very young ages: one Montreal-based study reported the mean age for gambling onset to be 11.5 years (Gupta and Derevensky, 1998). The number of primary and secondary school students in Ontario who are thought to have some kind of gambling problem has been estimated near 120,000 (Centre for Addiction and Mental Health, 2000). Given that there is evidence to suggest that adolescents with gambling problems are at an increased risk for suicidal ideation and attempts (Derevensky and Gupta, 2000), the issue of teenage problem gambling deserves swift and focussed attention.

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12 To avoid favouring certain classification systems in their meta analysis, these authors developed a system having 3 generic levels of problem gambling severity: level-1 equated with no gambling problems, level-2 “represents gamblers with subclinical levels of gambling problems” and level 3 “represents the most severe category of disordered gambling” (Shaffer, Hall and Vander Bilt, 1999, page 1370).
Women are also thought to have much higher rates of problem gambling than previously thought. For example, following the opening of Casino Windsor, it was found that there were no significant differences in the rates of problem and pathological gambling between men and women (Govoni et al., 1998). Women tend to experience the negative consequences of their gambling behaviour much earlier in their lives than men (Westphal and Joyce Johnson, 2000). This may be due to a number of factors including their significantly elevated rates of psychotropic drug use - (especially anti-depressants, minor tranquillizers and sedative-hypnotics) which are suggestive of higher rates of concurrent psychiatric disorders than men (Toneatto and Skinner, 2000). Given that women have traditionally been under-represented at self-help groups like Gamblers Anonymous (GA) and treatment programs (American Psychiatric Association, 1994; Westphal and Joyce Johnson, 2000), it will be important to find new ways to address the growing issues concerning women and problem gambling.

There is not a great deal of research that specifically examines the gambling behaviours of First Nations people. However, there is enough information to suggest that we should consider this population in terms of their unique circumstances and special-needs. In Alberta, for example, a study of Aboriginal in-school youth found that an astounding 49 percent either had a gambling problem or were at risk of becoming a problem gambler (National Council of Welfare, 1996). A different Alberta-based study has warned that the "...prevalence of problem and compulsive gambling among Natives may be twice that of the general population" (as cited in General Council, The United Church of Canada, 1998, page 9).

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13 Some might be more familiar with the terms ‘mutual-aid’ and/or ‘peer-support’. Throughout this paper, the term self-help is meant to be inclusive of these and all other forms of care which does not have its origins in professional, specialist-based treatment. Self-help is also inclusive of peer-oriented programs which are commonly known as ‘twelve-step’ programs.
The final special-needs group to be discussed in this context are people with concurrent mental health and substance abuse disorders. Problem gamblers have been found to have high rates of substance abuse, and substance abusers have also been found to have high rates of gambling problems (Crockford and el-Guebaly, 1998; National Gambling Impact Study Commission, 1999; Rupcich, Frisch and Govoni, 1997). Research has also generally found positive relationships between the severity of gambling problems and the likelihood of having a mental health problem (News from St. Louis. 1998). Suicide-attempt rates have also been reported to be as high as 20 percent among those in treatment for a gambling problem (American Psychiatric Association, 1994).

These attempts are likely linked to very high rates of personal indebtedness caused by gambling. A study of ‘pathological gamblers’ attending Gamblers Anonymous (GA) meetings in several urban areas of Quebec illustrates the point: 83 percent had to borrow money in order to gamble; 20 percent borrowed from ‘loan sharks’; 30 percent had debts from $75,000 to $150,000; 37 percent stole money from their employers in order to gamble; 36 percent had already lost their employment due to gambling; and 68 percent stated that they had engaged in illegal acts to obtain gambling money (Ladouceur et al., 1994).

No doubt, there will be many from these above-mentioned special-needs groups who will seek treatment for an ailment other than their problem gambling. This raises the important question of screening procedures at mental health and substance abuse treatment programs. In future, it would be helpful if clinicians could ask a few brief questions about gambling behaviour, even when the principal complaint(s) and symptoms were other than gambling. If they did, many more cases of problem gambling might be identified earlier than normal. For this reason, appeals have been made for family physicians to begin asking their patients about the extent of their
gambling behaviours (Kramer, 1997).

Public Opinion In Transition

Most would agree that public sentiment concerning gambling is evolving with society’s collective experience. Whereas gambling was typically thought to be a seedy pastime not that long ago (Preston et al. 1998), today “the public’s demand for gambling remains high, as does its approval rate” (Frey, 1998, page 9). Personal opinions about legalized gambling in Canada are certainly a function of many factors which may interact in complex ways. For example, opinions are influenced by: 1) the extent to which people have been personally affected by gambling (either via their own or a significant other’s gambling behaviour); 2) the perception that the advantages of the legal gambling industry (for example, net revenues or employment) outweigh the disadvantages, or vice versa; 3) residential proximity to a gaming establishment; and 4) the exposure to marketing strategies either pro or con. In their assessment of the legislative process concerning the legalization of gambling in the United States, Preston and colleagues determined that the outcome of such campaigns was a result of the ability of the pro-gambling interests to eliminate the concept of stigma from the voters’ minds: “With few exceptions, if relabelling is successful, gambling wins, and if relabelling is not successful, gambling loses” (Preston et al., 1998, page 193).

Public opinion may influence social policy, as with the example of VLTs remaining illegal in Ontario. Social policy could also have a considerable impact upon rates of gambling problems.

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14 In the words of Frey (1998, page 10) “corporate marketing efforts have created an image of gambling, or ‘gaming’ as the industry now prefers, as a desirable recreational activity that is most enjoyed in settings that remind one of Disneyland rather than a backroom bar”. This and other similar techniques are known as “stigma neutralization” (Preston et al., 1998, page 191) where positive attributions are attached to the behaviour in order to provide an explanatory description which is positive in nature.
To be sure, public opinion is not always clearly understood, and is often divided (for example, Albertans' split views about VLTs mentioned earlier). Our efforts to understand the basis of public opinion regarding legalized gambling and the impact on related social policy is a relatively new phenomena. It is also a challenging task since opinions regarding this subject have historically been and continue to be ever changing. It seems that an increasing number of citizens want to participate in the discourse as indicated by the 36 community plebiscites in Alberta regarding VLTs in October, 1998 (Wynne, 2000).

The Centre for Addiction and Mental Health study concerning the opening of Casino Niagara also examined attitudes and expectations of local residents in terms of what they thought might take place as a result of the new casino (Room, Turner and Ialomiteanu, 1998). Prior to the casino's opening, local residents feared that crime would increase and that traffic problems would ensue. One year later, respondents no longer perceived these issues as problems. despite some evidence that overall crime rates increased by about 10 percent (Nicol and Nolen, 1998).

Similar shifts in public opinion can be found elsewhere: for example, in Sydney, Nova Scotia, where after two years of operation, the anticipated crime wave did not materialize (Kimber, 1997). In Windsor, Ontario, in a pre- and post-test, the local approval rating of the casino increased 12 percentage points to 66 percent a year following the Casino's opening (Govoni et al., 1998). It will be interesting to learn if these type of findings are sustained over time.

As gambling problems increase, one might reasonably expect that the costs associated with this addiction will also rise. This could mitigate against any perceived advantages of

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15 Interestingly, they also expected that real estate values would surge and that non-casino related businesses would experience increased profits.
Online Assistance 26

gambling (like employment found at the larger casinos). One study (University of Manitoba) has estimated that every ‘compulsive gambler’ costs Canadian society $56,000 on average (Henriksson, 1996; National Council of Welfare, 1996). Assuming a Canadian compulsive gambling prevalence rate of two percent, the total national cost might run as high as $33.6 billion. Faced with social costs like that, citizens might come to rethink their receptivity to this form of ‘entertainment’.

Grassroots anti-gambling consumer movements have also attained some victories of recent. Following the suicide of a VLT-addicted individual in Rocky Mountain House, Alberta (a small town of 5,800 inhabitants), the citizenry voted to ban VLTs from the town limits (Nicol and Nolen, 1998). This was followed by plebiscites in several other Alberta communities, many of which voted to ban the machines (Campbell and Smith, 1998). Similarly, in Ontario’s 1997 municipal elections, 39 of 44 communities voted against the introduction of permanent charity casinos. “Taken together, such proposals indicate a growing resistance to gambling that was absent during the 1970s, 1980s, and early 1990s, when provincial governments rapidly expanded gambling in a variety of formats” (Campbell and Smith, 1998, page 33).

Governmental Reliance Upon Gambling Revenues

As the availability and types of gambling continue to grow, so does the amount of money spent on these activities. Not surprisingly, for those with an investment in these operations, they not only anticipate continued revenue but a continued growth in revenue as well. Governments are no exception to this rule: federal, provincial and more recently, municipal decision-makers see ‘casino gambling as a painless way to gain revenue without raising taxes’ (Kimber, 1997, paragraph 5). For example, after just nine months of VLTs being introduced to Prince Edward
Islanders in 1991, $14.4 million in revenue was raised\(^\text{16}\) (Henriksson, 1996). The Ontario Lottery Corporation paid the provincial government $737 million in 1997-98, which was an increase of 18 percent from just three years before (Ruimy, 1998). The Ontario Casino Corporation, which pays the province 20 percent of its revenues, paid out $329 million for the same period; this was an increase of 64 percent from the previous year (Ibid).

The same picture emerges for governments around the country: the Alberta treasury takes in about $518 million from VLTs alone (Mahoney, Mitchell and Fraser, 1998); Alberta's take from gambling revenue has recently exceeded its income from crude oil by $16 million (Nicol and Nolen, 1998). By 1995-96, seven Canadian provinces earned about three percent of their total revenues from gamblers (Korn, 2000; National Council of Welfare, 1996). Between 1985 and 1995, Canadian governments' net revenues from legal gambling rose 350 percent (Campbell and Smith, 1998); in 1996, provincial governments earned $4.6 billion (Ibid). According to Marshall (2000), this country's "revenues from non-charity gambling rose from $2.7 billion in 1992 to $7.4 billion in 1998, a 170 percent increase" (page 30). More recently, municipal and provincial governments in British Columbia have battled over slot machine revenues; that province has proposed legislation to supersede municipal bylaws concerning gambling (Howard, 1999).

These kinds of developments have prompted at least one group that has carefully considered the issue to claim that: "Provincial governments have become dependent on gambling revenues, especially from the highly lucrative VLTs, and also on ‘partnerships’ developed with private sector gambling companies" (General Council, The United Church of Canada, 1998, page 8). This view is also shared by some respected researchers (for example: Derevensky and Gupta. 

\(^{16}\) Despite these huge profits, the government of PEI withdrew the VLTs on April 1, 1998, bowing to pressure from a doctor-led coalition: their concerns: the devastation these machines were having on families (Nicol and Nolen, 1998).
2000) and some influential thinkers who analyze developments in the addictions community:

“...What is most crucial in the modern spread of gambling is that state governments are promoting gambling through extensive and deceptive advertising... Here we see American society engaged in a deliberate campaign to spread a debilitating addiction.... Incredibly, society is teaching its citizens the magical thinking that they can miraculously improve their lives without making any real effort or sacrifice” (Peele, 1992, page 134).

To be sure, promoting gambling appears to be a priority by provincial governments. “In 1996, Canadian provinces spent $43.4 million on lottery advertising - more than all the money spent by both federal and provincial governments for all other ad campaigns combined ($42.5 million)” (Gambling is a public health issue, 2000).

To the extent that public sentiment supports a gambling infrastructure, and therefore, governmental reliance on revenues generated by gambling, our society will most likely continue to witness an ongoing escalation of personal and social problems related to gambling. In the words of Kramer: “Greater normalization means greater access and more addicted” (1997, page 61).

* * *

This chapter has explored the increasing nature of gambling problems. Governmental reliance upon gambling revenue, public opinions which appear to condone such and the growing popularity of Internet-based gambling seem to be significant reasons why problem gambling is likely to grow in the foreseeable future. Special issues concerning youth, women, Native people and persons with concurrent psychiatric and substance abuse disorders were also examined.

It seems clear that the numbers of people who have access to legalized gambling are steadily increasing around the world. Many appear to be particularly vulnerable to developing significant problems associated with this behaviour. The next chapter will explore how individuals with gambling problems have fared in programs of recovery and potential areas for future development and improvement.
Chapter 3 - PROBLEM GAMBLING: TREATMENT AND RECOVERY ISSUES

This chapter begins with an examination of the critical issues which face the network of problem gambling treatment and self-help services. In particular, I will discuss how the system has traditionally been challenged to meet the unique needs of individuals from the previously mentioned special-needs groups. Special attention will also be given to the role that self-help plays in the lives of many addicted individuals. Afterwards, important lessons which have been gleaned from treatment and self-help research will be outlined along with related implications for future service development.

Gamblers Anonymous

Arguably, the most popular form of assistance for individuals with addiction problems is Alcoholics Anonymous (AA), which was formed in 1935. It boasts an impressive 87,000 groups in 150 countries and a membership of 1.7 million (Miller and McCrady, 1993). Membership in mutual-aid/self-help organizations such as AA has been skyrocketing, particularly over the past decade. In the U.S., conservative estimates are that 25 million people have belonged to self-help groups and 10 million report attendance within the past 12 months (Kessler, Mickelson and Zhao, 1997). The vast majority of self-help meetings (approaching three-quarters) relate to substance abuse issues (Ibid). Self-help organizations have resulted in many wide ranging benefits to both the individual and society (Humm, 1997; Humphreys, 1997; Humphreys and Ribisl, 1999).

Gamblers Anonymous (GA) is patterned after Alcoholics Anonymous; it was formed in 1957. and like AA, it has taken a “disease” orientation with complete abstinence as the goal of its membership (Browne, 1991). Researchers in Wales, who have engaged in participant observation studies at 32 GA meetings, found that GA’s adherence to this disease model explains both high attrition rates following attendance at a first meeting as well as continued attendance for others
(GA Observed, 1998). In some cases, GA members were found to become addicted to the GA meeting itself (Ibid). Still, attendance at GA has been found to be a good predictor of abstinence from gambling for those who decide to participate (Lesieur and Rosenthal, 1991).

Comparisons are frequently made between GA and AA, but according to Browne (1991), the groups are more different than they are similar. In 1989-1990, he spent 10 months doing observational work in Northern California, attending about 100 AA and 70 GA meetings and also conducting interviews. He argued that “contrary to popular assumption, GA is significantly different from AA” (Ibid, page 187).

These differences include:

1) GA’s slow growth and problems with retention of members despite the rapid expansion of gambling;

2) meetings are much longer than AA’s (up to four hours), and they are not offered as often;

3) the meetings frequently take place at the same time and location as Gam-Anon (the parallel group for significant others and similar to Al-Anon in alcoholism), which could make child care problematic;

4) there is a de-emphasis on God/spirituality in GA, which has a ‘humanist and social conception of spirituality’;

5) members of GA see the problem as their gambling behaviour and do not openly discuss feelings; whereas AA members see a problem with the ‘self’ and, therefore, an emphasis on working the 12-steps which often brings about emotional sharing; and.

6) GA is organized hierarchically (in other words, it is “top heavy”) with leadership
positions being very powerful and political\(^\text{17}\); by comparison, AA has a decentralized structure (Ibid).

Others have questioned the strong adherence to gambling abstinence for all participants of GA since relapses are quite common. One study for example, found that only eight percent were able to remain continuously abstinent one year following their first GA meeting (Stewart and Brown as cited by Lesieur, 1998). Discussions about anything less than complete abstinence are discouraged at GA. Marlatt and Gordon have observed (as cited in Walters, 1994) that if a gambler approaches the issue too dogmatically, a brief return to gambling is more likely to lead to a full-blown ‘relapse’. They have thus coined the term ‘Abstinence Violation Effect’, which is generally applicable to all forms of addiction; it has been described as follows: “This phenomenon involves the loss of control that follows violation of self-imposed rules. The end result of this process is increased probability of relapse” (Brownell, Marlatt, Lichtenstein and Wilson, 1986, page 767), since the individual problem gambler surmises (however wrongly) ‘that a failure is a failure, and since they have already crossed the line (lapse), they might as well make the most of it... (relapse)’.

GA’s “intolerance of other paths to recovery” (Browne. 1991. page 203) may inhibit the forms of discussions that group members undertake. For example, talk of ‘controlled’ gambling (or “moderated” behaviour, as others like Sanchez-Craig [1993] have called it) is frowned upon since this conflicts with the abstinence approach. Clearly, this is a sensitive topic as “a fine line must be drawn between preparing a person for mistakes and giving ‘permission’ for mistakes to occur by inferring that they are inevitable” (Brownell et al., 1986. page 773).

\(^{17}\)According to Browne (1991): “Power and status pervades the organization” which has the consequence of excluding its membership in decision making. AA on the other hand, “...guards against one person imposing their will on the group and at the same time allows many points of view to be expressed” (page 196).
Some have found that GA meetings might be better suited to the needs of the dominant culture. GA has been said by some to foster a “men’s club atmosphere” (Lesieur as cited by Browne, 1991, page 204) and is not conducive to retaining women and minorities (Browne, 1991). This is a somewhat curious finding in that there is research to suggest that other self-help groups are often better utilized by African-Americans than Caucasians (in the example of AA participation; see for example: Kaskutas, Weisner, Lee and Humphreys, 1999) and women versus men (see: Kessler, Mickelson and Zhao, 1997)\(^{18}\).

**Gender Issues in the Gambling World**

Concerns about the access to appropriate help for gambling problems goes beyond GA. As alluded to earlier, Mark and Lesieur (1992) conducted a review of original research in the gambling literature and concluded that more research is needed with female participants so as to challenge the prevailing stereotypes about female problem gamblers. They also indicated that “alternative treatment strategies should be investigated as well as the failure of GA to attract women in many areas where it holds meetings” (Ibid, page 559). They observed that such problems have apparently been going on for some time, citing research from the early 1970s where one author (Livingstone) “commented on the machismo of the male-oriented gambling world” (Ibid, page 550).

Problems of women’s access to gambling treatment may mirror that of treatment programs for other forms of addiction. Harrison (1997) has outlined barriers that women face in obtaining assistance for their problems: social attitudes and therapist attitudes towards a woman

\(^{18}\) This latter point may be due to the fact that many of the post-AA 12-step groups “owe their origins, their approach, and their appeal largely to feminism” (Irvine, 1996, page 721).
with an addiction problem; child care responsibilities which often limit one’s ability to seek help; safety issues which many women face as they discover attending self-help meetings in the public domain for the first time; systemic inequities in socio-economic variables; and pure loneliness which makes the recovery journey that much more daunting. Additional hurdles are identified by Spunt and colleagues (1998) as: therapists having little or no clinical experience with women gamblers, which often results in their problems being mis-diagnosed; “the stigma associated with being a bad woman” (page 2546); and lack of financial resources to pay for their treatment.

These added burdens may be responsible for women’s reduced participation in professional treatment programs as well as GA in many jurisdictions. Additional factors have been cited by Mark and Lesieur (1992):

An examination of recent prevalence studies reveals an interesting paradox: namely, that the incidence of problem and pathological gambling among females is more considerable than previously believed, and yet they are vastly under-represented in treatment programs... Gambling treatment programs that are ostensibly designed to service the problem gambling population are, in actuality, meeting the needs of only the male segment of this population... Social service agencies whose clienteles are predominantly female... do not screen for gambling behaviours (page 555).

One of Ontario’s foremost treatment programs, The Donwood Problem Gambling Program determined that women only comprised 11 percent of their clients in 1995-96. Even though this participation rate was similar to other centres at the time (see for example Horodecki, 1992), this prompted the Program’s Director to recommend that measures be taken to increase the number of female clients as well as efforts to increase the program’s visibility (Donwood Problem Gambling Program, 1996).

These efforts appear to be paying off in that, more recently, women have accounted for 27 percent of the program’s caseload (Boughton, 1999). In fact, more recent data collected from 43 treatment programs in Ontario between January 1, 1998, and April 30, 2000, indicate that women
represented about 38.5 percent of all problem gambling clients (Rush and Shaw Moxam, 2000). It will be interesting to learn to what extent this trend is also being found in other jurisdictions. Griffiths, Scarfe and Bellringer (1999) for example, have recently reported continued low rates (10 percent) of women’s participation with Britain’s national telephone gambling help-line for the period from November 1997 to October 1998.

Factors Regarding Help-Seeking and Help-Avoidance

Even with the increase in help-seeking behaviour by women in some areas, the fact still remains that only a small proportion of problem gamblers come forward for help (both men and women). One Canadian household survey found that only three percent of those who believed that alcohol had created some problems for them sought help from a specialized service, and of this group, the majority (53 to 89 percent depending on one’s gender and age group) went exclusively to AA (Ogborne and DeWitt, 1999). The National Gambling Impact Study (1999) similarly reported that only three percent of American problem gamblers sought professional help in a given year causing the authors to recommend that “Congress direct all federal agencies conducting or supporting longitudinal research... [to] include questions about treatment-seeking behavior, in order to begin to address the issue of the unmet need for treatment, which is currently unknown” (Ibid, page 8-2).

This is an issue which is also frequently cited in other substance abuse studies (Sobell, Ellingstad and Sobell, 2000), where untreated versus treated alcohol abusers have been found to range from three-to-one to thirteen-to-one (Roizen, Cahalan and Shanks as cited by Sobell, Cunningham, Sobell, Agrawal, Gavin, Leo and Singh 1996). Perhaps the most poignant example of this comes from two independent surveys (conducted several years apart) where over three
quarters (78 percent) of participants reported recovery from an alcohol problem without the aid of formal treatment (Sobell, Cunningham and Sobell, 1996). Such data support the idea that individuals can be successful in recovering from alcohol problems on their own; but the data also call attention to the importance of factors which influence help-seeking (and help-avoidance) behaviours.

The fact that problem gambling programs have historically been underutilized raises a number of interesting questions. For example, how have these programs been advertised and have they more readily come to the attention of certain sub-groups? Did potential sources of referral harbour silent biases regarding the nature of problem gambling (for instance: "this is a male disease; women don’t gamble...") and therefore did not screen for gambling problems amongst their clientele? Did they make other suggestions for recovery besides referral to formal treatment programs - GA for instance? Did individuals themselves opt out of formal treatments since they may have concerns about matters such as anonymity, stigma, security, cost and childcare? Did they opt out because they would have preferred a more generic health facility and briefer interventions that better fit their own schedules?

Typically, these kinds of questions have not been addressed by addiction researchers. For example, in their review of 38 natural recovery\textsuperscript{19} studies which met their inclusion criteria (40 different respondent samples in total), Sobell and colleagues (2000) found that information regarding barriers to entering alcohol or drug treatment programs were only provided by 22.5 percent of the respondent samples. Of those that did report such information, it was found that eight of nine studies described participants who had concerns about being stigmatized or labelled:

\textsuperscript{19} Natural recovery is a term given to those who show evidence of successful recovery from a substance abuse or gambling problem without the benefit of formal treatment or mutual-aid/self-help group affiliation.
other reasons were: negative prior experiences with treatment; problems which were not serious
evenough to warrant formal intervention; and individuals did not want to share their problems. The
authors went on to state that it was interesting that these factors paralleled research regarding
why others had delayed their treatments.

Schober and Annis (1996) have summarized barriers to seeking addictions treatment as
relating to either client issues or program issues. Client-centred barriers include psychosocial risk
factors (for example, negative emotional states like depression and anxiety, early childhood
victimization, physical and sexual abuse), concerns about being labelled or stigmatized and having
insufficient personal resources to get into treatment (low income, lack of social supports and so
forth). Program barriers include the selective nature of some programs (for example, programs
originally structured to meet the needs of men may not be very adept at helping women), service
characteristics (expectations about treatment efficacy, abstinence requirements, physical location
of the program) and staffing (morale, core competencies) of the program.

To date, very little has been written about how and why problem gamblers seek or avoid
treatment. Some evidence suggests that male problem gamblers are more likely to seek treatment
for a concurrent substance abuse problem and that women are more likely to present for help at
an outpatient mental health facility (Westphal and Joyce Johnson, 2000). This is consistent with
other's findings that women and the elderly utilize general medical services more extensively than
younger adults and men (Aday and Andersen, 1974) and from research on substance abuse help-
seeking behaviour where women are more likely to present for help at mental health facilities as
opposed to addiction treatment centres (Ogborne and DeWitt, 1999). Several have found that the
more serious a gambling problem, the more likely that the individual will seek formal help
(Hodgins and el-Guebaly, 2000; Marotta, 2000; Toneatto et al., 2000); again, this trend has been
observed with respect to substance abuse treatment-seekers and with those whose problems started at an early age (Sobell, Ellingstad and Sobell, 2000). This suggests that those who begin to gamble later in life and whose gambling problems are not as severe, may be good candidates for natural recovery and minimal intervention processes.

Hodgins and el-Guebaly (2000) were the first to publish a study regarding natural recovery among problem gamblers. Through the media, they recruited 43 participants who satisfied criteria that their problems with gambling were resolved and another 63 as a control group of problem gamblers who were still actively gambling; all provided collateral sources of information. The two major reasons which influenced the resolved group to initially take action about their problems were negative emotional states (stress, guilt, depression) and financial concerns. Treatment was only utilized by a minority from each group: 47 percent of the resolved group and 37 percent of the active group. The main reason why both groups did not seek treatment was because they wanted to resolve their problems on their own (82 percent). However, at least half of the participants also indicated that being embarrassed or too proud was a factor and 53 percent stated that they were concerned about stigma. Active gamblers were more likely to indicate that embarrassment/pride was an issue that kept them from initiating treatment.

According to these authors:

The finding that the major reason for not seeking treatment was the desire to handle the problem without help has consistently been reported in studies of people with serious alcohol and other drug problems who have not accessed treatment. A common interpretation is that this attitude is in part related to stigmatization of addiction problems. In our sample, like samples of alcohol and other drug problems, about half of those not accessing treatment directly identified this factor. About half also reported embarrassment/pride as important factors. Clearly, public campaigns aimed at shifting attitudes towards treatment-seeking for gambling problems are crucial (Ibid, page 789).

In a study with results similar to that of Hodgins and el-Guebaly's, Toneatto and
colleagues (2000) also suggested that treatment was often a more likely option, once individuals had failed at self-recovery. In comparing self-recovered former problem gamblers (n=29) to treatment-recovered former problem gamblers (n=29), Marotta (2000) found that treatment-seekers’ primary reason for deciding to quit concerned their negative emotional states (psychological distress). Self-recovered participants, on the other hand, reported that the main reason they decided to quit was because they embarked on a cognitive appraisal process and weighed the pros and cons of their behaviour. In addition to treatment-seekers having more severe gambling problems, they were also differentiated by their preference for video poker.

Primary reasons for not seeking formal treatment concerned wanting to do it on their own, denial and problem minimization, and embarrassment and anxiety. Other reasons included a difficulty of identification with the compulsive gambler image and the requirement of complete abstinence as a treatment goal.

**General Lessons from Treatment System Research**

Given that “the vast majority of alcohol-impaired people never seek specialist treatment, though they are frequently in contact with other health and social services” (Bien, Miller and Tonigan, 1993, page 329), it is reasonable to think that many probably avoid seeking help because they may be concerned about a society which tends to ‘medicalize’ and ‘stigmatize’ such problems. This may also be the case with problem gamblers. Volberg and Steadman (1988), for instance, found that with regard to pathological gamblers “large segments of the general population [were] not receiving [treatment] services” (page 502). That study in New York State during 1986 found that treatment programs tended to serve white males who were over the age of 30 and under-served women, non-whites, those under 30 years of age, those earning less than
$25,000, and those who had not graduated from high school (Ibid). Not surprisingly, others have found that most of these kinds of treatment programs are located in middle-class neighbourhoods (Spunt et al., 1998).

Specialist-delivered addiction and mental health treatment programs have had a long history of including all or some of the following aspects of care:

- diagnostic labelling “based on an illness model in which an expert defines the problem” (Fisher, 1994, page 913).

- therapist-imposed treatment goals and

- approaches to care which have been onerous and often times disruptive to the individual’s lifestyle20.

The backlash against this approach has been captured by the Director of the National Empowerment Centre, who recently stated: “As survivors and consumers, we are not cases, and we do not want to be managed!” (Fisher, 1994, page 915).

In their well-intentioned efforts to motivate supposedly ‘unmotivated clients’ (frequently thought to be ‘in denial’), many counsellors have previously been found to be overly rigid, confrontational and judgemental. Such an approach has been found to be predictive of eventual poorer outcomes (Bien et al., 1993; Lehman, Ellard and Wortman, 1986). Hopefully this situation is changing for the better with the importance now being placed from within the field on clinicians’ core competencies and ongoing professional training opportunities. Still, perceptions

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20 In the past, this was frequently accompanied by a referral to a residential treatment program (Peele, 1992). According to Gregoire (2000), “Fixed lengths of stay and residentially based service provision have a long tradition in the treatment of alcohol and other substance use disorders.... Until recently, 28-day rehabilitation programs were prevalent among residential facilities” (page 241). With the move to managed-care in the United States, this situation has markedly changed. However, there is evidence to suggest that social factors like homelessness and unemployment, frequently determine who receives residential treatment - as opposed to clinical issues like problem severity (see for example, Gregoire, 2000).
of an overly rigid treatment system may linger for some would-be clients and could interfere with their utilization of these programs. For example, in the Hodgins and el-Guebaly study (2000), almost a quarter of the participants indicated that they had never sought formal help because they had negative attitudes towards treatment. Marotta (2000) also found that some did not participate in treatment owing to their concerns about rigid abstinence requirements and the notion that one needs to hit ‘rock bottom’ before taking action.

There has been a growing sense in the addictions field that there is no “one size fits all” treatment (U.S. Institute of Medicine, 1990). This perspective recognizes the heterogeneity of the various kinds of problems and their responsiveness to treatment. As Peele has commented: “Addiction is not an all-or-nothing thing, but a continuum from moderate excess to severe compulsion” (Peele, 1992, page 133). The notion that one treatment approach can be successful for all of these problems is being replaced by an enlightened awareness that care should be matched to the needs of the individual client where one’s rights are respected: for example, the right to the least intrusive form of treatment (Breslin, Sobell, Sobell, Buchan and Cunningham, 1997; Rinas and Clyne-Jackson, 1988; Sobell, Cunningham, Sobell, Agrawal et al. 1996).

Unfortunately, many instances can be found where either the more traditional treatment approaches remain operative. help for problem gamblers is very limited (Dickerson, Hinchy and Legg-England, 1990). or as has already been discussed, they simply do not feel comfortable presenting for help. For these reasons, there has been an increase in interest regarding the utilization of self-help interventions, both for problem gamblers (Cummings and Gambino, 1992:

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21 Percentages were not specified.

22 For a more complete discussion of client rights, the reader is advised to consult Rinas and Clyne-Jackson’s book Professional Conduct and Legal Concerns in Mental Health Practice (1988), specifically chapter 3.
Dickerson et al., 1990) and for mental health problems generally (Fisher, 1994). However, it should be noted that in reviewing the literature on the obstacles to self-help group involvement, Luarn (1993) concluded that "difficulties arise because the ability to participate in social support systems is limited by time pressures, geographic location, education, physical mobility, and ability to act during a crisis" (page 33).

Cummings and Gambino (1992) undertook an interesting study where they asked 75 clinicians who treat problem gamblers about their perceptions of the critical tasks for effectiveness. The most important aspect was self-help/social support: "We learned that clinical perceptions strongly indicate the importance of developing support systems for clients while dealing with crisis situations as a major clinical priority" (Ibid, page 195). This is an area which has received wide support over the years (for example, Cassel, 1974; Lehman et al., 1986); with Cobb (1976) arguing: "That social support facilitates coping with crisis and adaptation to change" (page 302) and as a result "we should start now to teach all our patients, both well and sick, how to give and receive social support" (page 312). Humphreys, Moos and Cohen (1997) more recently found that support from one's friends greatly enhances a problem drinker's chances of success.

In an examination of the alcoholism, smoking and obesity literature which considers the important clinical issue of relapse, it was found that several issues are predictive of successful outcomes (Brownell et al., 1986). First, the authors acknowledge that "self-quitters may differ from therapy-assisted quitters", and that with the former, there is likely much that remains unknown about how they go about their recovery. In fact, there is probably much that we also do not know about therapy-assisted problem gamblers since this is a relatively new area of enquiry (Hodgins and el-Guebaly, 2000; Lesieur and Rosenthal, 1991). Given the similarity of the
processes of addiction and the overlap in populations (Ladouceur et al., 1994; Spunt et al., 1998).

it may be safe to draw parallels from the alcoholism, smoking and obesity research to the understanding of how to assist problem gamblers. Actually, it is common to assume that there are similarities in important processes like relapse issues which are shared across various addictions (Brownell et al., 1986).

Brownell et al.'s (1986) comprehensive review of the relapse prevention literature has drawn attention to the importance of several key treatment-related issues:

1) that exposure to lapse/relapse may provide an individual with a critical learning opportunity (what triggered the lapse and why did the coping strategies not provide sufficient protection and so forth?);

2) that negative emotional states (for example: anger, anxiety, stress) are very frequently associated with relapse;

3) that successful outcomes have been equated with cognitive (for example, one’s level of confidence that things will improve) and behavioural (such as the ability to stay away from events which are associated with gambling activities) coping strategies:

4) that social and family supports have been found to be very helpful, while stressful interpersonal relationships have been found to interfere with the goals of recovery;

5) that the simpler the treatment program, the better the client’s compliance to it;

6) that individuals will enhance their chances of success if they continue to monitor their progress on an ongoing basis beyond the initial phases of recovery; and,

7) that special care must be exercised in assisting individuals who are new to the treatment

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23 Walters (1994) refers to these behavioural coping strategies as 'cue avoidance' and 'cue exposure'.
system since their motivation to proceed with therapy is often particularly fragile at this stage.

The importance of social support in this regard cannot be overstated. While self-help groups have traditionally defied outcome evaluation (Ogborne, 1993), good anecdotal evidence for their effectiveness is available (Brownell et al., 1986). More importantly, there is now strong empirical support for their efficacy: eight-year follow-up studies have demonstrated the long-term positive effects of AA participation (Humphreys, Moos and Cohen, 1997).

As information about successful naturally-recovered individuals becomes more available and is combined with what we generally know to be efficacious approaches to addiction problems, our ability to better assist problem gamblers will improve. For example, illustrations of how some of the newer findings can augment the lessons from Brownell et al. (1986) can be seen in the Hodgins and el-Guebaly (2000) and Marotta (2000) studies. In the case of Hodgins and el-Guebaly’s work, Brownell et al.’s concept of behavioural coping strategies is advanced by the finding that the most important factor which helped to maintain a non-problem gambling status was involvement in new activities like exercise, reading, spending time with family members and renewed interest in employment (Hodgins and el-Guebaly, 2000). Marotta’s (2000) participants reported that they especially found that recollections of their problems were very helpful, as well as the development of new friendships with healthy people: each of these adding a new aspect to our understanding. By paying careful attention to these determinants of successful outcomes, it is thought that current and future initiatives aimed at helping the problem gambler will be that much more effective.

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This chapter has examined some of the challenges faced by the addiction treatment system
in responding to the needs of a diverse population of problem gamblers. The related issue of why so many problem gamblers go untreated was also considered. In this regard, self-help support groups may hold special promise since many more individuals utilize these forms of help versus treatment programs. Special attention was paid to access issues, particularly as they concern individuals from special-needs populations. With new technological advances like the Internet, it may be realistic to think that our ability to better care for problem gamblers is significantly improved, especially if we utilize the lessons from addiction treatment research more precisely.

The next chapter will examine how the Internet is unparalleled in its potential to facilitate such helpful approaches with large numbers of individuals from virtually all parts of the world and from all walks of life. Online support groups will form an important part of this discussion.
Chapter 4 - CMC AND ONLINE SUPPORT GROUPS

This chapter will investigate how we have arrived at the point that there are over 100,000 online discussion groups worldwide (Baym, 1996) available to the estimated 332.7 million people using the Internet (Nua Internet Surveys, 2000a). In this regard, I will discuss the issue of community as it pertains to Internet-based support groups and examine what is known about these groups from the literature. This chapter will also explore how problem gamblers might be well served by computer-mediated-communication (CMC)-delivered support groups, free of the stigma associated with physical presence as in the case of face-to-face sessions. The chapter will conclude with an examination of important findings concerning online research methodologies.

Creating Community

The Internet has grown from the ability of one computer to communicate with another through telephone lines, dating back to just 1969 (Jones, 1995a). Jones (1995b) and others like Rheingold (1993) and Gilder (1994) contend that just as radio and television were tools for education and produced a different society, computer networks will have a similar influence.

The term ‘cyberspace’ was coined by fiction writer William Gibson in his novel “Neuromancer” (Rheingold, 1993) where the prefix cyber came from the Greeks and means “to pilot” (Jones, 1995b, page vii). Gibson describes the cyber experience as a “consensual hallucination” (Heim, 1993, page 79). These certainly are apt descriptions given our apparent ability to “fly” through the Internet educating and entertaining ourselves thanks to browsers and hypertext links. Seabrook (1997, page 163) describes it as “pulling content toward you instead of having it pushed”. This in turn, helps one to better understand the full meaning of the term
‘prosumer’ where Internet participants are increasingly taking responsibility for providing the content that others would consume\textsuperscript{24}.

With the Internet, individuals appear to have an opportunity to increase their voice. One’s Internet ‘voice’, however, can be disguised, altered, silenced, amplified or changed in any way the individual would like. The Internet provides anonymity that likely is not available in other forms of interaction.

Internet users tend to read others’ messages more than they ‘post’ their own; the practice has become known as “lurking”. One study found that on average, news group participants began by reading others’ posts a couple of months before making their own contributions (Parks and Floyd, 1996). Others have suggested that learning as an online activity is both passive and active (Wilson and Whitelock as cited by Steeples and Mayes, 1998). According to McLaughlin, Osborne and Smith (1995): “Silent readers may feel that they are a part of the conversation: however, this vicarious participation raises the spectre of pseudocommunity” (page 92). Such a statement suggests that agreement exists about what constitutes ‘community’ and ‘virtual community’. Unfortunately, there is much disagreement about such definitions. However, after spending several years in various online environments, Rheingold (1993) has defined virtual communities as:

“Social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace” (page 5).

To be sure, CMC participants generally understand their activity online to be primarily

\textsuperscript{24}This term was originally coined by Toffler (1980) to illustrate how market forces were changing with the coming together of producers of goods and their consumers into a single entity. According to Toffler: “Prosuming involves the ‘de-marketization’ of at least certain activities and therefore a sharply altered role for the market in society. It suggests an economy of the future unlike any we have known” (Ibid, page 276).
social, or as Jones states: “Socially produced space” (1995b, page 17). Virtual communities have some rather decided advantages over geographic ones (McLaughlin et al., 1995): “Life will be happier for the online individual because the people with whom one interacts most strongly will be selected more by commonality of interests and goals than by accidents of proximity” (Licklider and Taylor25 as cited in Jones, 1995b, page 23).

In an online environment, the participants do not have the benefit of sensory cues with which to interpret others’ messages (Baym, 1995). Narrow bandwidth, as it is also called by Parks and Floyd (1996), is described as follows: “Relational cues emanating from the physical context are missing, as are nonverbal cues regarding vocal qualities, bodily movement, facial expressions, and physical appearance” (page 81). Since this inevitably leads to a high degree of anonymity, participation is much more evenly distributed, but it comes at a cost of decreased efficiency. It takes more work and creativity to resolve issues online than it might in face-to-face settings (Baym, 1995; Rintel and Pittam, 1997). This added work may make online participants eager to resolve issues, and perhaps hyper-frustrated, if they come across an individual who appears to disrupt the process (either intentionally or inadvertently). Since they are anonymous, participants are more likely to have a lowered level of social inhibitions. When these kinds of situations arise, they are often met with quite an expressive outburst which ordinarily would be deemed inappropriate if delivered face-to-face. Such outbursts are known as “flaming”. It has been found that when time is not restricted, socio-emotional content will increase in CMC settings

25 According to Rheingold (1993), these were the two main people who sponsored the initial development of ARPAnet (the forerunner to the Internet). In 1960, Licklider had written a paper entitled “Man-Computer Symbiosis” wherein can be found his prophetic statement: “In not too many years, human brains and computing machines will be coupled together very tightly, and that the resulting partnership will think as no human being has ever thought and process data in a way not approached by the information handling machines we know today” (Rheingold, 1993, page 70).
(Parks and Floyd, 1996).

In the world of CMC, words are everything. Therefore, participants obtain attention, respect and power depending on the words they choose to use. As MacKinnon (1995, page 118) states: "Within Usenet, words are the sole means of characterizing the network's universe. Thus wordsmanship in Usenet is a far more valued skill than it is in the external world". MacKinnon articulates the three essential conditions for a personae's existence in CMC: 1) participants require access to the Internet; 2) they must make a visible demonstration of presence through the posting and responding to notes; and 3) there needs to be continuous participation or they will be forgotten (1995, page 120). Real world power, prestige and 'trappings' do not equate with importance in CMC communities if they are not accompanied by eloquence and articulation (Ibid).

In an interesting field study of online news group participants, Parks and Floyd (1996) wanted to learn about the formation of personal relationships. They employed a two-stage process to select their sample, with randomization occurring at each stage. By their claims, this was the "first systemic survey of online personal relationships in a random sample of news group participants" (page 92). They discovered that 60 percent of respondents indicated that they had developed personal relationships; half of this group (30 percent of the total sample) indicated that their relationships were "highly developed". The majority (two-thirds) of those who had formed relationships were likely to extend them to other non-CMC settings (in person [33.3 percent], telephone [35.3 percent] or postal service letter [28.4 percent]). The best predictor of who is likely to develop online relationships tends to be those with experience in this format; that is, the duration of participants' affiliation with cyberspace and the frequency with which they participate.
Online Support Groups - An Overview

As previously discussed, individuals are increasingly seeking assistance for a variety of health concerns through a vast array of self-help/mutual-aid groups. According to Kessler, Michelson and Zhao (1999) self-help groups are the most prevalent form of small group membership in the United States. In Canada, there are some 4,000 Alcoholics Anonymous groups (Quarter, 1992). According to Finn (1996): “It has been estimated that there are more than 400 distinct types of self-help/mutual-aid groups, comprising 500,000 groups in the U.S.... and that the number of groups has quadrupled in the last 10 years” (page 22, my emphasis to illustrate a range from AA to NA to GA). Benefits of self-help/mutual-aid have been described by Finn and Lavitt (1994) as being multi-factorial:

- Sharing information such as ideas, facts, resources; engaging in dialectical dialogue to see both sides of an issue; discussing “taboo” subjects; being “all in the same boat.”
- Experiencing mutual support; experiencing mutual demand for change from models perceived as similar to oneself; engaging in problem solving and rehearsing; overcoming alienation and isolation; diffusing of emotional cathexis; taking the role of helper:
- Developing inspiration and hope; developing social networks; and assisting more people less expensively (page 24).

Evidence also suggests that many will initiate other forms of help (for example, treatment) having already had considerable exposure to self-help; often times, their treatment-seeking behaviour is a direct result of encouragement received from the self-help group (Humphreys, Kaskutas and Weisner, 1998). Regardless of whether the groups are offered face-to-face or via CMC, support groups afford members a safe opportunity to reduce their levels of stress while they learn and improve through practising their coping mechanisms (Meier, 1997).

The numbers of self-help participants will likely continue to increase as many new groups are becoming available to a much larger audience through the Internet (Madara, 1997). Groups can be either synchronous (live chat groups where several people can be posting messages at the
same time) or asynchronous (where a record of posts according to various themes or "threads" is available based on the time they were received by the host). At present, it is difficult to know which type is utilized more and for what types of health problems.

After her review of health-related 'discussion lists', Lacroix concluded that "Internet discussion list technology is a powerful information source in consumer health" (1997, page 140). Online support groups have been reported for a variety of health-related issues (Davison, Pennebaker and Dickerson, 2000) including health promotion and information dissemination for: breast cancer (Sharf, 1997; Weinberg, Schmale. Uken and Wessel, 1996; Weinberg, Uken, Schmale and Adamek, 1995); single young mothers (Dunham et al., 1998); eating disorders (Winzelberg, 1997); parents of children with special-needs (Mickelson, 1997); the procurement of miscellaneous medical information (Culver, Gerr and Frumkin, 1997); amyotrophic lateral sclerosis (Feenberg, Licht, Kane, Moran and Smith, 1996); addictions recovery (Finn, 1996; King, 1996)\(^2\); sexual abuse survivors (Finn and Lavitt, 1994); problem gambling (Cooper, 1998); emotionally-disturbed adolescents (Zimmerman, 1987); and social work students dealing with stress (Meier, 1997). Anderson and Kanuka (1997) even considered adult educators' professional development needs using an online forum. Despite these and a growing number of reports, researchers call attention to the fact that there is little in the way of scientific evidence regarding these groups' outcomes and processes (Galinsky, Schopler and Abell, 1997; Finn, 1996; Fox, 1998) or ideal size (Meier, 1997).

Ferguson and Madara (1998) have outlined 16 strengths of both traditional face-to-face and new online self-help approaches. Of interest, is that they went on to list an additional 10

\(^2\)Le Bourdais (1997) has reported that there are approximately 100 addictions-oriented online support groups, however, only a few are specific to problem gambling.
advantages of online groups which were not shared by face-to-face versions. For example, the additional benefits of online groups included more convenient access (participants did not need to get dressed up to attend, and when they wanted to leave, they simply had to click a button); it was easier to find groups for rare conditions; it was easier to locate both popular and technical information via online sources; participants experienced more of an equal or collegial relationship with their health care provider (when this was available to them online); participants felt a greater sense of personal responsibility in the online version and thus were more proactive regarding their health care; health care providers were moved from a position of authority to that of a facilitator, a role that was easier for other participants to relate to; health care providers improved their knowledge from participating in online discussion groups since they learn more about their patients' needs; discussions could be stored as archives and used as a refresher; physical barriers were minimized (for example, bad weather, geography and shift work can be neutralized by online formats); and anonymity was safeguarded absolutely (unlike in traditional settings where anonymity is merely a function of the promise members make to one another - Ibid).

Others have suggested additional benefits of online support groups including the fact that social status cues (for example, physical appearance) are minimized (Finn, 1996; Galinsky et al., 1997); reluctant members might be more likely to participate if they are not called upon to verbalize in front of a live audience (Finn and Lavitt, 1994; Meier, 1997; Parks and Floyd, 1996); feelings of social isolation can be overcome (Dunham et al., 1998); and busy individuals who ordinarily might not have the time to travel to meet one another can still get together online (Anderson and Kanuka, 1997). Davison, Pennebaker and Dickerson (2000) found that the highest online support group participation levels were correlated with the most stigmatizing health/social conditions - conditions which were not well served by the medical community.
On the other hand, several papers call attention to drawbacks associated with CMC: access is limited to those with the financial means to afford computer equipment and Internet access (Finn, 1996; Lacroix, 1997); participants might become more socially isolated as they spend increasing amounts of their time with 'virtual friends' as opposed to real-life friends and family (Finn, 1996; Kraut et al., 1998; Zimmerman, 1987) and this in turn might increase feelings of loneliness and depression (Kraut et al., 1998); since membership cannot be assured, discussions may end up being "unfocussed and repetitive" (Meier, 1997, page 43); participants might become addicted to the Internet as a result of prolonged exposure (Morahan-Martin, 1998); links between those apparently addicted to the Internet and their heavy gambling habits have been reported (Ibid); and some concerns about liability have been noted in connection with advice being rendered in this format (Lacroix, 1997; Schwadron, 1997). 27

According to Ferguson (1997), there are basically three different groupings of online "self-helpers": those with concerns about their physical health, those with mental health issues and, finally, those seeking assistance with an addiction or a social problem of some sort.

Unfortunately, not much empirical data exist with regard to the relative outcomes of such self-help groups. What follows is a discussion of what is known.

**Outcomes of Online Support Groups**

Ferguson (1997) has reported that following an informal survey he conducted, six percent of participants said they had avoided at least one trip to the hospital emergency department as a result of information they obtained online, 26 percent indicated that they had used the Internet

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27 With regard to liability issues, it has been reported that the American Psychological Association had been examining online therapy in closer detail (Rice, 1997).
rather than visiting their physician, and as many as 65 percent told of an increased ability to deal with a medical problem based on information they received online.

In a study of six breast cancer patients, Weinberg et al. (1995, 1996) found that the women involved with this group developed positive relationships with one another. They especially benefited from reading each other’s posts. Those who were the furthest in their personal recovery found the support group (which spanned three months) to be the least personally helpful, but their participation was also the most altruistic. Conversely, those who were most ill derived the greatest personal assistance, but their illness prevented them from giving much back to others in the way of advice and support.

Sharf (1997) explored the merits of CMC with members of the Breast Cancer List by conducting participant observation and a discourse analysis. The “BCL” as it is known, is based in St. John’s, Newfoundland, and at the time of the study, there were approximately 825 participants from 27 countries. Approximately 25 percent of the participants were men. Sharf (1997) commented that

...the messages produced herein seem authentic, vital, and at times even urgent; the social interactions of participants are strongly tied to personal actions taken outside the List; and participants verify that communication within the BCL has helped to enhance their respective sense of personal power in other aspects of their lives (page 80).

Sharf’s keen objective observational skills were put to the test when, as a researcher, she found herself becoming a participant of the group she was studying. She describes it this way:

Five months into my task, my self-perceived ethos of mere investigator was shattered. I was quickly scanning a backlog of messages when I came across… “my wife Diédre, from whom some of you may have heard on this list, died from breast cancer at the age of 32….”

...included was a moving eulogy. I found myself engulfed with feelings of sadness and strangeness by news of people I didn’t know and yet, in a sense, I did. I remembered reading Diédre’s bedridden notes, marvelled that her husband had chosen to let the participants of the List know what had happened so soon after her death, and realized fully for the first time what it meant to be a member of this disembodied, yet strongly
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connected, community... (Ibid, page 70).

Sharf’s comments illustrate the potential of this communicative practice.

Sharf’s findings are consistent with the research of Zimmerman (1987) that compared an online support group with small face-to-face groups of emotionally disturbed adolescents. Zimmerman (1987) found that the online support group resulted in a greater expression of feelings and more frequent references to interpersonal issues than in the face-to-face group. A total of 18 adolescents (61 percent male) ranging in age from 13 to 20 years were involved in a several month long computer project where they learned basic skills and later became involved with a closed (‘in house’) discussion group with no constraints on their language or content. It was suggested that the “male-dominated orientation” (page 838) which often is found in face-to-face settings may be diminished by the CMC format. In the end, Zimmerman concluded that “computer-mediated communication may represent a new resource for eliciting emotionally rich, relationship-oriented verbal interaction among emotionally disturbed adolescents” (1987, page 837).

Meier’s study of “a six-week, professionally led, semi-structured online support group to help social workers manage stress” (1997, page 36) also used both qualitative and quantitative approaches. While there appeared to be some difficulties with declining membership in this group, this may have been due to the fact that during the summer (when the study took place), participants (with a mean age of 30) may have had less interest in computing in favour of outdoor activities. In addition, the group size of 11 was small so any attrition would be noticed. In the end, there were just six regular contributors. Still, Meier (1997) concluded that “the structural complexity of members’ messages increased over time” (page 45).

An interesting study from the Halifax area conducted pre-tests and post-tests of parental
stress of single mothers aged 15 to 20 who were exposed to a private (or "firewall-protected") CMC support group over a six-month duration (Dunham et al., 1998). Participation of the 42 members was determined to be either high, medium or low. A majority of the participants used the group consistently once they had been recruited and computer equipment was supplied to them. The researchers found that participation was correlated with higher feelings of belonging and reduced stress levels. In addition, those who provided the most support to others also tended to receive the most support. In addition, the most socially isolated mothers were the most likely to participate. It was found that: "The development of close bonds between individuals with shared interests and problems tended to be the rule, not the exception... Our data indicate that the technology does not suppress socioemotional content" (Ibid. page 300-1). In the end, the mothers themselves insisted on a continuation of their support network beyond the study.

A survey of group practitioners was conducted to learn of their experience, knowledge and comfort levels with computer groups (Galinsky et al., 1997). Of 213 usable surveys, the authors found that the most frequently cited purposes for CMC were education and support. They also noted that mastering the technology itself can be an empowering process (Ibid).

Rheingold (1993) offers many illuminating first-hand accounts of his experiences with various online communities, starting in the summer of 1985. One of the more powerful stories concerns a father's use of a parenting group which met on a now famous computer conferencing system known as the WELL (Whole Earth 'Lectronic Link28). The father's story concerned his 14-month-old daughter's struggle to survive as she was connected to various electronic medical

28 Created in the spring of 1985, the WELL had dozens of different public conferences which members could join (or 'log into'), initially at $3 per hour. The founders envisioned three goals for this endeavour including: "To facilitate communications among interesting people in the San Francisco Bay area, to provide sophisticated conferencing at a revolutionary low price, and to bring e-mail to the masses" (Rheingold, 1993, page 42).
equipment (monitors, suction machines and so forth). The father eloquently shared his feelings to others connected to the WELL at all hours of the day. Weeks later, after 'Lillie' had recovered, her father posted the following note:

Before this time, my computer screen had never been a place to go for solace. Far from it. But there it was. Those nights sitting up late with my daughter, I'd go to my computer, dial up the WELL, and ramble. I wrote about what was happening that night or that year. I didn't know anyone I was 'talking' to. I had never laid eyes on them. At 3:00 am my 'real' friends were asleep, so I turned to this foreign, invisible community for support. The WELL was always awake. Any difficulty is harder to bear in isolation. There is nothing to measure against, to lean against. Typing out my journal entries into the computer and over the phone lines, I found fellowship and comfort in this unlikely medium (Rheingold, 1993, page 20).

Rheingold stated that he had never met this family in person but that "I feel I know something powerful and intimate about the Allisons and have strong emotional ties to them" (Ibid, page 19).

Finally, Ferguson (1996) described a very moving letter from 'Jack in Utah' who posted on a death and dying support group. Therein, he discussed his son's accidental death by strangulation as he had been attempting to make a Halloween haunted house in the garage. The father's anguish was overwhelming as he asked for help from those associated with the online group. Within the next two days, Jack received dozens of responses of support, empathy and advice. Sometime afterwards, Ferguson presented Jack's story at a conference by way of illustrating the powerful possibilities of online self-help. Following his address, he was approached by "two very distinguished therapists" who concluded that had Jack come to them for help "that although they [were] both very well trained, highly-respected therapists, that they probably would not have been able to help him in nearly such an immediate, compassionate, practical and powerful way" (Ibid, paragraph 34). Despite their uniqueness, powerful stories like these are often found within the CMC literature.
Gender Issues In CMC

Gender inequities in computing have been discussed for many years and have been linked to systemic issues (for example, see: Reisman, 1990). Eastman (1991) noted that a decade ago, of Compuserve's 300,000 members only four percent were women. This pattern of gender inequality in Internet use has changed; Canadian women's participation (49 percent) now rivals that of men (51 percent) (ACNielsen, 1998). Some would argue that the Internet holds even more promise for women than men (Allen, 1995; Lapham, 1998). Since this is such a new area, it is just now becoming clear how the Internet might be utilized differentially by men and women.

There is some evidence that women have recently increased their participation in online self-help groups and show signs of continuing to do so. For example, for the calendar year 1997, women's participation, as measured by the number of postings at an online support group for problem gamblers known as GAweb, increased significantly (Cooper, 1998). In addition, women's participation mirrored men's in terms of the frequencies of posts, individual contributor frequencies and length of postings. Some differences emerged, however: women were more likely to begin a new theme where men were more likely to respond to another's posting; women tended to seek help more than men who tended to respond in helping ways more often; men were much more likely to provide their E-mail address and they also tended to have a longer duration of affiliation with the self-help group and reported longer tenure of gambling abstinence (self reported) (Ibid).

Savicki, Lingenfelter and Kelley (1996) found about 13 percent in their online study could not be identified in terms of their gender. This has been noted elsewhere (Cooper, 1998) where 12 percent had undetermined gender. Reliable ways have eluded researchers in determining the gender of online participants. Names provided by participants are coded as: a typical male/female
name; as gender ambiguous (like Chris); or as obscure to the researcher. Even this approach is seriously flawed since there is no guarantee that the author of an obviously ‘male-originated’ posting is actually of that gender (or vice versa).

Finn and Lavitt (1994) examined a number of groups for sexual abuse survivors and found that females are under-represented as participants who post notes. They did find that women participated to a greater degree than men and that the “gender interaction patterns also appear to be influenced by the gender distribution of the conference” (Ibid. page 30).

Herring (1993) found that men tended to dominate the discussion in the groups she observed and concluded that this was in fact a form of censorship. The issue of “flaming”\(^{29}\) has also been examined, and while most have found that men are responsible for the majority of this type of behaviour, the results are not conclusive: in part, because we really have no reliable way to identify an online author’s gender. Little attention has been paid to individual’s reactions to being the recipient of a flame and to know if gender is an issue. Smith, McLaughlin and Osborne (1997), however, have reported the most comprehensive study in this regard to date. They found that “few individuals respond publicly to their reproachers” (paragraph 1), and that women were equally as feisty as their male counterparts. They state: “One might expect women to be more temperate in the tone of their reproaches. Such was not the case. Female reproachers were no more friendly and helpful, or less hostile, than were males” (Ibid. paragraph 35).

Seabrook’s (1997) account of being the recipient of a flame for the first time is illustrative:

I rocked back in my chair and said out loud, “Whoa! I got flamed.” I knew something momentous had just happened to me, and I was waiting to find out what it would actually feel like. I felt cold. The flame seemed to put a chill into the centre of my chest which I

\(^{29}\) The issue of flaming was also discussed earlier. Basically, these are “outbursts of angry personal attacks” (Rheingold, 1993, page 137) which are quick to escalate into what have become known as ‘flame wars’ given the anonymous nature of CMC.
could feel spreading slowly outward. My shoulders began to shake. I got up and walked quickly upstairs to the soda machines, then came back to my desk. There were the flames on my screen, not dying away like insults shouted in the street, flaming me all over again in the asynchronous eternity that is time in the online world. Being premeditated, the insults had more force than insults shouted in the heat of the moment, and the technology greased the words--with a kind of intelligence that allowed them to slide more easily into my mind.

I printed the flames. On paper, they were less intense. They seemed to require the glow of the screen for their venom. I showed the printed copies to people around the office. Women were sympathetic; men advised me to grow a thicker skin. When I tried to explain my flamed feeling to one non-computer-using woman, she said, “Yeah, it's like when someone breaks into your car,” which was close, but actually it was more like someone had broken into my head. It was the same feeling of being wired into each other's minds that I enjoyed in e-mail, but this was not enjoyable at all (page 96).

Knowing that flaming takes place in some online support groups may have an impact upon an individual's participation. This is another area where more research is needed.

A Prelude to Methodology: CMC Research Designs

An excellent opportunity to implement ethnographic research exists in a CMC environment. The essential components of the research paradigms, as described by Rothe (1994), Moon, Dillon and Sprenkle (1990) and Willms and Johnson (1993), are easily adaptable to the study of an online support group. One problem, however, has to do with biased samples of study participants (for example, Selwyn and Robson, 1998).

In an online environment, it is unclear how or why certain individuals come forward to either post notes or to participate in surveys. These self-selected groups are only representative of that part of the population who have Internet access and who opt to give up some privacy. Others, however, have concluded that “the demographic profile for individual users approximates the profile of that produced by a random sampling of users if that were possible” (Boncheck et al., as cited in Coomber, 1997, paragraph 5.5).
Several ways to increase participation have been provided by Coomber (1997) including: a demonstration of the researcher’s concern for anonymity; demonstrating that participants’ anonymity will be protected; and surveys which can be completed online. Privacy is an important issue, but a consensus of opinion has not yet emerged to questions like: Is privacy in an online environment the same as it would be in a face-to-face environment (Jones, 1994)? Some researchers ask for the permission of online participants to quote them while others do not (Paccagnella, 1997).

Selwyn and Robson (1998) suggest that electronic surveys conducted over the Internet have “very favourable response rates” (paragraph 12) and that their cost is much less to administer than traditional paper-and-pencil formats. Depending on the size of the questionnaire, there might also be advantages to the environment (some surveys are quite long and require many sheets of paper).

Finally, Coomber’s (1997) work online with drug pushers illustrates how we might have better access to more marginalized populations. Problem gamblers who might fear some stigma may be more likely to participate in research if it was conducted entirely over a CMC medium. The Internet, it can be argued, is akin to the safety of Goffman’s (1963) ‘back places’ where persons who share the traits of a given stigma assemble to support one another.

* * *

This chapter has considered the tremendous growth in communications as a result of computer technology and the implications for research. The issue of whether online groups form communities was explored, as well as the impact of participants’ characteristics, in particular gender. It seems clear that opportunities do exist for positive interventions utilizing CMC, but care should be exercised for a variety of reasons including individual issues of privacy. However,
in spite of the growth of online support groups, the amount of research with regard to their functioning is limited. This is particularly the case with online support groups for problem gamblers.

This chapter also examined some of the more pertinent issues concerning the conduct of research in online environments. Issues like sample bias and protection of participants’ privacy were considered. It is clear that a growing number of researchers are addressing these issues and informing our collective understanding of online research protocols. One of the most promising aspects of this new route to knowledge creation is its ability to involve marginalized participants who otherwise might avoid involvement, given their concerns regarding the disclosure of stigmatizing information, an area which will be explored in greater detail in the next chapter.
Chapter 5 - THE COMPLICATING EFFECTS OF STIGMA

Although this chapter addresses the issue of stigma in general, attempts will be made to relate the discussion to problem gambling wherever possible. What the literature says about stigma, and in particular, the dilemmas which often face individuals who ‘own’ problems like compulsive gambling (which are not always apparent to others) will be outlined. I will review how individuals who possess a stigmatizing condition often exert considerable effort in its concealment and are likely reluctant to disclose it. From the discussion about disclosure strategies, some preliminary ideas will be raised of how and why online assistance might be of particular help. These ideas will be elaborated upon later in this dissertation.

Stigma Research Findings

Goffman (1963) is widely recognized for his pioneering work on stigma. For example, he noted that it was the ancient Greeks who originated the term “to refer to bodily signs designed to expose something unusual and bad about the moral status of the signifier” (Ibid. page 1). Since the individual with a stigma is perceived as not quite human, it is understandable why others might want to keep their distance. Dindia’s (1998) definition is perhaps more useful, if not more contemporary: “The term stigma refers to a stable characteristic or attribute of an individual that is perceived as damaging to the individual’s reputation” (page 83). The key word here being ‘perceived’, as the phenomena of stigma is very much an issue of perception. The term stigma has also been used in parallel ways to describe a variety of other more generic situations, for example, negative public responses to a variety of environmental perils. GAweb, Slovic and Flynn (1996) have provided the following definition with regard to hazardous conditions:

Stigma refers to something that is to be shunned or avoided not just because it is dangerous but because it overturns or destroys a positive condition, signalling that what was or should be something good and acceptable is now marked as blemished or tainted (page 216).
At the individual level, the fact that a stigma exists is often the cause of many negative emotional states, most notably shame, guilt, embarrassment and anxiety.

Goffman (1963) described two basic categories of stigma: those who are “discredited” and those who are “discreditable”. Discredited people have attributes that are readily apparent to others (for example, particular physical features). Difficulties experienced by the discredited concern tensions when they interact with so-called “normals” [sic]. Discreditable stigmas are not readily perceptible to others. According to Goffman, these include attributes which are socially defined:

Blemishes of individual character perceived as weak will, domineering or unnatural passions, treacherous and rigid beliefs, and dishonesty, these being inferred from a known record of, for example, mental disorder, imprisonment, addiction, alcoholism, homosexuality, unemployment, suicidal attempts, and radical political behavior (Ibid. page 4).³⁰

These attributes might either be currently active or in remission (for example, a problem gambler who is ‘in recovery’). A person’s affiliation with another who owns the stigmatizing condition might also be discreditable since there may be guilt by association. Some have termed this ‘courtesy stigma’ (Sigelman et al., 1991). Among the problems associated with discreditable-type stigmas are the management of information, including strategies to both conceal from and disclose to others.

In her study of 146 non-chronic, ex-psychiatric patients, Herman (1993) found that the vast majority (80 percent) engaged in some form of information control with regard to their

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³⁰ It is interesting to note that in his entire book, Goffman (1963) only made one explicit reference to problem gambling as a stigmatizing condition. Even so, it came on the fifth last page in a fleeting reference to “full time gamblers” as one of several types of “social deviants” (which also included the likes of drug addicts, criminals, jazz musicians and beach dwellers to name a few). This serves to further illustrate that stigmas are indeed socially defined since gambling was quite a rare behaviour in the early 1960’s.

³¹ Also termed “passing” by Goffman (1963, page 42).
condition. Several techniques were used by patients in their efforts to conceal information about themselves; indeed, “over two-thirds engaged in withdrawal as a form of concealment, especially during the early months following discharge” (Ibid, page 308) and another two-thirds avoided contact with self-help groups because they were considered symbolic of the psychiatric experience. Once again, these strategies were more likely to occur in the first few months following discharge from treatment; perhaps at a time that support was most needed by the individual.

The management of potentially negative, intimate personal information is no easy task. In some cases, untrue stories are put forward and then the individual must accurately remember who was told what and when. Goffman refers to this as “in-deeper-ism, that is, pressure to elaborate a lie further and further to prevent a given disclosure” (Goffman, 1963, page 83). Some will take on the identity of other conditions, possibly even more stigmatizing ones, to protect their own unique secret. For example, Murphy and Irwin (1992) presented a case of a methadone maintenance recipient, who while travelling on business with his supervisor concealed the fact that he was picking up his methadone prescription. Instead, he constructed a story of an extra-marital affair to explain his absences. In other instances, methadone patients preferred to tell others they were using cocaine or had relapsed to heroin use, rather than admit the truth. Methadone patients engaging in concealment frequently must confront the issue of information management on a daily basis (Ibid).

Cunningham, Sobell and Sobell (1998) contend that despite its frequency (78 percent), one of the reasons that natural recovery from alcoholism is either misunderstood or unknown, is that, those who have been successful in their recovery keep this fact to themselves. They fear the stigma associated with having such a problem, even if it has since been resolved.
Those who experience stigma often fear that others will discover their secret. There is evidence which suggests that some will avoid seeking help if they believe their affiliation with a particular treatment agency will cause others to learn of their secret condition (Raniseski and Sigelman, 1992). Stigma can abound when it concerns addictive behaviours; astoundingly, some of the worst offenders are health care professionals (Dubey, 1999; Kittle-Canale, 2000). Knox (1971) presented early evidence of this, calling attention to the moral judgements made by psychiatrists and psychologists towards alcohol abusers such that they typically preferred to avoid treating this population. This issue continued to receive attention two decades later (Kahle and White, 1991). Similarly, others have discussed how psychiatrists stigmatize persons with mental health problems (Bar-Levav, 1976).

The decision about whether to conceal or disclose is complicated by the relationship between the stigmatized person and their associates. Quite often, the person who the stigmatized individual wants to keep uninformed the most, is a significant other such as a spouse (for example, in the case of mounting financial debts due to excessive gambling). To be sure, the process is a dynamic one. Dindia (1998) describes the self-disclosure process as being cyclical, ongoing, ever changing and open-ended. She goes on to say that: “Self-disclosure is also contextualized by the relationship between the discloser and the recipient. Research indicates that the level of intimacy of the relationship affects stigma disclosure” (page 102). In this way a dynamic tension exists: at times we may need to keep information secret from those closest to us and yet our ability to reveal intimate information about ourselves is more likely in a caring relationship.

Several additional strategies have been found to be helpful in the disclosure process. Some will indirectly hint at their condition, perhaps with inferences, as a means of determining if this is a respectful person to confide in. Some might display oblique symbols which tell the
informed observer of their status; for example, a bumper sticker that reads "Easy Does It" likely announces the owner's affiliation with Alcoholics Anonymous to those in the know. Some stigmatized persons will "test the waters" through careful observation of others' messages. This enables the problem gambler, for instance, to better determine another person's level of sensitivity and receptivity towards problem gamblers. This has been called "staging" (Dindia, 1998) since the stigmatized person can consciously decide how much to reveal based on their comfort level with others. Herman (1993) found that decisions regarding concealment and disclosure were a function of whether others were considered to be either "safe" or "risky" by the ex-psychiatric patient; similar techniques have also been reported by methadone patients (Murphy and Irwin, 1992). Finally, disclosure is more likely in the company of peers who share the same stigma and particularly where they might successfully disguise their identity (Goffman, 1963). This last point applies to online self-help groups; participants share in a stigmatizing condition and their identity is disguised (or at least it is easily disguisable).

Herman (1993) concluded her study by calling attention to the fact that as a result of experiencing stigma, people often acquire unique skills: "Ex-psychiatric patients are not passive, powerless individuals: rather, they are strategists, expert managers and negotiators who... have their hands in shaping their own social fates" (page 324). Since her study was conducted prior to the rapid development of online self-help groups, one wonders what her conclusions might have been in 2000. Certainly, there are many online locations which specialize in service to special-needs populations. Would she have found for example, that two-thirds of her sample would have avoided stigma symbols like self-help groups if they had been able to anonymously participate in

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32 "Backplaces" as Goffman (1963) refers to this phenomena (page 81).
such groups online? Clearly, many of the isolating constraints faced by stigmatized individuals in the past are minimized thanks to new methods of communication such as electronic mail and online support groups.

Avoiding Stigma Through Online Assistance

Thus far it has been established that:

1. Stigma is a very subjective phenomena. For many, the shame and anguish of their attribute drives them into seclusion where they find short-term respite but not necessarily longer term remediation. The self-imposed isolation also frequently prevents them from associating publicly with any person or group which shares their attribute (for example, the problem gambler avoiding a GA meeting for fear of who might see them in attendance).

2. Much energy goes into the management of information, especially by those whose stigmatizing attribute is not readily apparent (the ‘discreditable’). It might be more helpful to these individuals if such energy could be more positively directed towards self-esteem building versus guilt reduction.

3. Evidence suggests that individuals with a stigmatizing attribute benefit from the company of others with similar fates. Moreover, they find that sharing personal information is therapeutic and cathartic. The sharing of personal information will be more likely to occur if the individual has established a caring, trusting and supportive relationship with other recipients.

4. Disclosure of stigmatizing information is an ongoing problem, which might benefit from supportive others whenever and wherever the individual wants to take action (not just
when they can marshal together the required ingredients of safe confidants and/or safe setting).

These lessons may assist in the development of a new model where disclosure does not necessarily have the same risks associated with conventional face-to-face support groups. Such a model would recognize that disclosure is not an all or nothing phenomena. Along with its being a dynamic and cyclical construct, as Dindia (1998) points out, it is also a matter of degree. That is, individuals who experience stigma will likely conduct their own tests to determine if others are receptive to receiving disclosure information. They might also decide to release such information piecemeal so that if necessary, they can still ‘save face’. If reactions to innuendo and minimally revealing information are not what is hoped for, the stigmatized individual can step back. However, this ‘stepping back’ in face-to-face situations may not be an easy task.

* * *

This chapter has examined possible reasons why some problem gamblers are not availing themselves of assistance (either self-help or professional). The issue of stigma was discussed since newer forms of communication like CMC. may neutralize stigma’s significance, thereby making it easier to learn about and to help those in need of assistance for gambling problems.

This concludes the literature review portion of this dissertation. In the next chapter, questions which logically follow from the literature review are formulated into the research questions of this study.
Chapter 6 - THESIS RESEARCH QUESTIONS

Given that this is an exploratory study of an online support group for problem gamblers, there is not a formal test of hypotheses derived from a theory. On the other hand, the study is not completely open-ended, like many other exploratory studies. Instead, this study is structured around a series of research questions that provide mechanisms for organizing the analysis of the data. These research questions are derived from the review of the literature in Chapters 2 to 5 that forms the context for this study. Although much of that literature is background material (for example, the documentation of the extent to which gambling has become a serious social problem), it creates a foundation upon which this study is built. This chapter begins with a brief summary of the major points made in Chapters 2 to 5; following that, a more specific rationale is presented for each of the research questions.

That being said, a cautionary note is in order. The context for this study presents unique sampling difficulties: these will be evident when the sample is discussed in the next chapter. Others attempting to study online self-help groups have experienced similar challenges (Davison et al., 2000). Given the characteristics of this study, these sampling difficulties are not easily overcome and, therefore, underline the exploratory nature of the research. Nevertheless, it would be unfortunate if sampling difficulties of online groups would cause researchers to avoid investigating them. There is a pioneering aspect to this study in that it represents research of a phenomenon that is unreported in the literature; but as a result of the sampling difficulties, caution is needed in interpreting the results.

Summary of Chapters 2 to 5

Chapter 2 discussed the growing evidence that gambling has become a serious social problem, inspired in part by the state-supported forms such as lotteries (and in Canada’s case.
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casinos) and the growth of Internet gambling. Special-needs populations are particularly affected by the growth of gambling.

Chapter 3 discussed the evidence that only a minority of persons with addictions seek help through the formal treatment system. It appears that self-help groups and natural forms of recovery account for much of the improvement by people with addictions.

Chapter 4 discussed the literature regarding online support groups. In spite of the evidence that online support groups have become a common and an important part of the recovery process for people with various afflictions and social concerns, there is only a scant research literature on this phenomenon and very little understanding as to why it is so popular. With respect to online support groups for problem gambling, there does not appear to be any published research to date.

Chapter 5 discussed stigma because this concept appears to provide a basis for understanding the appeal of online support groups for health issues such as problem gambling. Stigma appears to be an important reason why persons with addictions avoid the formal treatment system and in many cases, face-to-face support groups. Online support groups provide anonymity to their participants and, therefore, offer the potential to more easily overcome stigma.

The Research Questions

According to North (1998), impediments to seeking social support include "the fear of being stigmatized and judged by others and fear of a lack of confidentiality" (page 38). Indeed, in the Herman (1993) study of ex-psychiatric patients (referred to earlier), it was found that as many as two-thirds avoided contact with self-help groups because they were trying to conceal their difficulties. This is a sad commentary since it is known that individuals with a particular stigma
seem to benefit from the company of similar others. Rather, in order to find such support, it appears that strategies are utilized to 'test the waters' in discerning if it is safe to open up.

At the present time, it is unclear exactly how often problem gamblers avoid seeking help from treatment and self-help groups because they fear being stigmatized. This is an emerging area of research. The two studies discussed in Chapter 3 (Hodgins and el-Guebaly, 2000; Marotta, 2000), were respectively published/presented very recently. Both studies found that concerns about being embarrassed were foremost in the minds of those who chose not to seek treatment. In fact, in the Hodgins and el-Guebaly study, 53 percent of the sample indicated that they did not seek treatment because they were concerned about stigma. It would be helpful to know how generalizable these findings are to other problem gamblers.

Goffman's (1963) work made a fleeting reference to the issue of treatment avoidance due to stigma, but he was also diligent in informing us that stigma is socially defined: to be sure, social conditions today have changed considerably from the early 1960s. This change is particularly true of how gambling problems are viewed. Back then, gambling was largely an activity restricted to the resort areas of the State of Nevada, and outside of that it was generally seen as a questionable and possibly illegal business. Nowadays, governments encourage us to participate in gambling activities such as lotteries because they contribute to state revenues. In addition, we are exposed to paradoxical societal messages that celebrate the right to privacy, individualism and self-reliance on the one hand, and going public on the other (Dindia, 1998). Preston and colleagues (Preston and Smith, 1985; Preston et al., 1998) have suggested that problem gamblers are a stigmatized group. Their research, however, did not specifically address if problem gamblers' themselves felt stigmatized. The answer to this question is important, particularly as society prepares for an upsurge in problem gamblers needing assistance over the next decade.
While it seems quite plausible that problem gamblers as a group have genuinely felt stigmatized, this issue should nevertheless, be empirically explored in greater detail. It would be helpful to know for example, more about problem gamblers’ avoidance of various forms of help. Therefore, the first research question this thesis addressed is:

When problem gamblers who utilize an Internet support group avoid face-to-face treatment programs and/or self-help groups, is it because they fear being stigmatized?

It would be helpful to know the extent to which such stigma behaviours are associated with variables like concerns about confidentiality at self-help meetings. If it turns out that many problem gamblers avoid these forms of assistance for that reason, then remedial efforts can and should be undertaken.

The second research question followed from the literature regarding online support groups, as discussed in Chapter 4. These groups have been shown to have beneficial effects for a variety of health and social concerns. However, to date, little is known about how such interventions might be of assistance to problem gamblers. One of the important advantages of online support groups may be the ability of the individual who feels a certain degree of stigma to participate anonymously. Returning to Herman’s (1993) study, one wonders how many of the two-thirds who avoided participation with a self-help group because of the fear of being stigmatized would have done so had they been completely assured of anonymity and confidentiality.

A complex decisional balance likely exists for the stigmatized problem gambler who has reached the point of being interested in assistance. On the one hand, there is the interest in
obtaining information, support, fellowship, validation, and all the benefits of membership in a self-help community. On the other hand, there could be the fear that they might not be accepted, their identity will be communicated to others, and they will be left isolated and rejected. Online support groups might help to tip the scale in favour of taking a chance on disclosure, if the negative concerns can be neutralized. In other words, if problem gamblers can remain totally anonymous, and can attend a meeting essentially as an ‘invisible person’ (and thereby assess the relative receptivity and safety of the group), this may increase the chance of disclosure. Add to that the practical advantages of online support groups - for example, 24-hour service, the ability to participate from home - and the appeal of this form of assistance is undeniable. However, does involvement in an online support group increase the likelihood of participation in other forms of recovery such as self-help groups and other forms of treatment? The second research question this thesis addressed, speaks to this issue:

**Does the amount of exposure to an Internet support group make it more likely that the problem gambler will participate in a program of recovery?**

Based on Herman’s (1993) work, it is realistic to think that online assistance may afford the problem gambler with a unique opportunity to ‘test the waters’ of the disclosure process. If problem gamblers have an opportunity to ‘test drive’ online forms of assistance, where there were no risks of personal identification associated with their ‘sampling’ behaviour, some may like the experience and take appropriate action. The assumption behind this research question is that for problem gamblers, and particularly those who feel stigmatized, participation may occur in stages, and ‘lurking’ may be the first step in a gradual process leading to disclosure in an online support group, and possibly followed by involvement in face-to-face arrangements. In order to begin to
assess this assumption, the following research question was posed:

**Does ‘lurking’ at an online support group increase the probability of disclosure of gambling problems?**

Since much has been written about the unique challenges posed by the more conventional face-to-face approaches to problem gamblers’ treatment (especially with regard to special-needs populations), the final research question examined demographic variables:

**Are demographic characteristics associated with the issues being addressed in this study: the role of stigma in the avoidance of face-to-face approaches, the relationship between online assistance and participation in a program of recovery, the relationship between lurking and disclosure?**

To assess the impact of demographics, the variables associated with this concept such as gender, age, SOGS-scores and so forth, will be related to each of the other research questions.

* * *

Based on the answers to the above research questions, in the Discussion chapter, I will outline a model that addresses the role of online support groups in the treatment of problem gambling. This model will also suggest new approaches to the prevention of more serious gambling addictions. However, prior to that discussion, the methodology of the study will be described, followed by a reporting of the results.
Chapter 7 - METHODOLOGY

This chapter consists of the following sections: an overview of the study; a description of how participants were recruited; a discussion of some process issues concerning the use of electronic surveys; the research procedures and measures utilized in the study; a series of operational definitions for key terms and a description of data analysis procedures.

Overview of the Study

To answer the four questions presented in Chapter 6, a 41-item survey was used. It was comprised of questions which were forced-choice (yes/no), scaled and open-ended (qualitative). Study participants who also agreed to a supplementary E-mail interview were asked to comment on the following:

1. What (if anything) do/did you like most about GAweb?
2. What (if anything) do/did you like least about GAweb?
3. Has GAweb made any difference in your gambling behaviour and please describe why you think that might be?

The study underwent a rigorous ethical review at the Ontario Institute for Studies in Education/University of Toronto in July, 1999, when it was still at the proposal stage. Prior to that, survey questions had been pilot-tested with a group of volunteers who had varied backgrounds.

Recruitment of Participants

Fifty-two individuals were recruited from a popular online website which offers a supportive environment to problem gamblers; one person did not meet the problem gambler criteria for inclusion and another’s electronic survey could not be opened due to an infected
computer file, leaving 50 to participate in the study. Of the 50 participants who satisfied the criteria for data analysis inclusion, 25 (50 percent) also returned responses to the supplementary interview questions.

The problem-gambling website known as ‘GAweb’ is found on the World Wide Web at: <http://www.teleport.com/~catchwrd/GAweb/guestbook.html>; it has been publicly available on the Internet since May, 1996, and has a high volume of traffic from around the world (Cooper, 1998). The recruitment phase ran from August, 1999, to December, 1999; but this also included inviting anybody who had posted a note to the website dating back to May, 1999 (assuming of course that they also included their correct E-mail address).

Participants were recruited in two ways: via a broad solicitation as part of GAweb’s main discussion as well as via individual approaches to those who had provided their E-mail addresses. Since these two recruitment procedures varied slightly, they are explained below in more detail.

a) Broad Solicitation

For the first method of recruitment, towards the start of each month from August to December, 1999, a brief note was posted asking visitors at GAweb if they would consider participating in this study (Appendix A). In total, five such postings were made. Those with an interest in participating were provided with a more complete description of the study by simply clicking on the hypertext link within the body of the post. Individuals would then be transported to a separate website (known as the ‘Gambling Study Info Site’ - GSIS) where a more detailed

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33 In June, 1999, the system manager at GAweb gave his permission to recruit participants from GAweb for the study.
explanation of the study was outlined. Included at the GSIS were: statements about the aims of
the study; what would be required of the participants (for example, how long it would likely take
to complete the questionnaire); how they could withdraw at any time; how their identity would be
protected; and how they could receive further information about the study; as well as its findings
after the study was complete (Appendix B).

After reading the information and making a decision to participate, individuals were then
instructed to send a brief E-mail note consenting to their involvement. In turn, they were E-
mailed a questionnaire (Appendix E) attached as either a WordPerfect or Word document,
depending on what was identified as the preference by the participant. However, it quickly
became apparent that some were having trouble opening these attached files and it was taking
longer than expected to get the survey into the hands of potential participants (a problem not
encountered in the pilot testing phase). Therefore, shortly after the first few requests had been
received, I began to respond to every request to participate by sending the survey as two separate
attachments within an E-mail note (WordPerfect and Word documents). As well, the survey was
embedded directly into the E-mail note itself.

The WordPerfect and Word documents were identical in their appearance: the embedded
version was identical in its content but was not as visually attractive as the attached versions.
Recipients of the survey were asked to complete whichever version they wanted and to return it
using whatever method they preferred: E-mail (as an attached file or embedded into the E-mail
note), fax or postal service. After a period of between one and two weeks, a follow-up reminder
was E-mailed to those who did not return their survey; if needed, a second reminder note was
sent.

It was hoped that by recruiting participants in this way, I would be able to hear from
individuals, who until then had only 'lurked' at this support group (that is, they had been reading others' posts, but had not posted their own notes; at least they had not been posting notes for several months prior to this study under the name they provided to me). Requests to participate in the study were received from 19 individuals as a result of these broad solicitation postings. Of that group, 10 (52.6 percent) returned their surveys; this comprised about 20 percent of all participants in the study. Since it is impossible to know exactly how many people might have read the broad solicitation note, it is therefore impossible to estimate the overall rate of response for this particular approach.

Once the recruitment period had come to a conclusion at the end of December, 1999, a note of thanks (Appendix D) was posted at GAweb and the Gambling Study Info Site. It was important to post these notes since some subsequent archive readers interested in participating might learn of the study after the recruitment period had been concluded. These posts essentially informed (and will continue to inform in the future) would-be participants that the study has since concluded.

b) Direct Solicitation

The second means of recruitment involved a brief note (Appendix C) being sent directly to 176 individuals from whom there had not been any prior response (through the broad solicitation) and who had posted at GAweb with their correct E-mail address. This method also gave an opportunity to hear from individuals who perhaps had since discontinued their affiliation with this particular online group. Starting in August and ending in December, 1999, a list of E-mail

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34 Initially, notes were sent to 194 individuals but 18 of these apparently had invalid E-mail addresses since their electronic messages were returned undelivered (9.3 percent of all invitations).
addresses was generated from individuals who had posted notes at GAweb for that month (the August list actually went back to May 1, 1999). To minimize the likelihood of errors, a `cut and paste’ approach was utilized in assembling these lists. Next, these individuals were E-mailed the standard letter explaining why they were being contacted (that is, I had seen their post at GAweb and wanted them to consider participating in this study). These people were only approached once: non-response to the initial note did not lead to subsequent requests for participation.

Individuals with an interest in participating were instructed to visit the Gambling Study Info Site webpage, which detailed the specifics of this study (Appendix B). From there, the protocol was identical to those responding to the broad solicitation. Table F-1 (Appendix F) identifies the month these letters were sent to prospective participants, the numbers who requested to receive the survey as a result, and ultimately those who participated in the study. The mean number of letters sent each month was 22. This resulted in roughly nine monthly requests for the survey and an average of five completed surveys per month.

Of the 176 people who received personalized invitations to participate, 71 (40.3 percent) requested the survey. Of this group, 41 (57.8 percent) returned usable surveys (one other person returned their survey but on two separate occasions it was sent with a virus attached and could not be safely opened). Thus, the direct solicitation process resulted in a rate of return of about 23 percent of those initially invited to participate; the rate of return for those who had a survey sent to them was a more respectable 57.8 percent. Since other studies which have followed this or a similar methodology report response rates based on the number of surveys in distribution, 57.8 percent is, therefore, considered to be the rate of response for the direct solicitation procedure in this study. The majority of this study's participants (80 percent) were recruited via the direct solicitation procedure.
Modes of Response

Many (43.1 percent) returned their survey as an electronic file attached to an E-mail note. Many others, though, experienced technical computer or software difficulties which necessitated a variety of modes of communication; often times the survey was embedded right into an E-mail note (29.4 percent), some resorted to postal delivery service (17.7 percent) and a few sent their completed surveys via facsimile (9.8 percent).

Process Issues

Obtaining information from problem gamblers about their online recovery practices is quite novel; to date, there do not appear to be any published accounts of this kind of research. Knowledge of how problem gamblers utilize the Internet as part of their recovery is in its infancy; therefore, there is much to learn about surveying this population via electronic means. Some argue the importance of examining a survey’s response rate as a means of understanding the quality of the survey (Stephen and Soldo, 1990). Therefore, it is important to examine in more detail, the sampling process used in this study. Such an examination should provide some insight into the unique challenges faced by this kind of research with problem gamblers.

This study sought to recruit participants using the two procedures described above: a broad solicitation method and a direct letter of invitation to potential participants. Estimating a true overall rate of return for this study is compromised by this dual-methodology and other factors like the inability of knowing if recipients of electronic mail actually read such. It is possible that many potential participants merely sent the note of invitation to their trash bin without ever opening it upon discovering that it dealt with a sensitive subject matter ("Please participate in my problem gambling study") or because it was sent from an unknown source. This
is not surprising given the amount of bothersome (and at times infected) electronic "junk mail" that is distributed these days; many people simply delete E-mail messages from their "in-basket" if they do not recognize the sender's name or the nature of the correspondence. Thus, it was impossible to determine a rate of return for the broad solicitation method as the number of individuals who might have read the note of invitation is unknown. Nineteen individuals responded to the note and of these 10 (52.6 percent) returned completed surveys; however, it will never be known how many others actually read this note and chose not to make contact.

Similarly, the degree to which recipients of the personalized invitation actually read it (and considered the request) cannot be established. Thus, the rate of return for this aspect of the recruitment phase has been calculated based on the actual number of surveys that were distributed - a return rate of 57.8 percent. As mentioned earlier, this manner of calculating a rate of return is consistent with other studies (for example: King, 1994; Sheehan and Grubbs-Hoy, 1999; Smith, 1997). It should also be noted that many studies have incorrectly calculated their return rates. For example, Shaffer and colleagues (1999) noted in their meta-analysis, that response rate "was incorrectly calculated in over half of the studies (p. 28)" (Henriksson, 1999, note 6).

In the direct solicitation phase of this study, 194 individuals were initially approached with an invitation to participate. About 10 percent of these invitations were returned undelivered. Others have also commented about high rates of invalid E-mail addresses: for example, Sheehan and Grubbs-Hoy (1999), Schaefer and Dillman (1998), Smith (1997) and Comley (1996) respectively reported such delivery failures at rates of 26.0, 8.0, 9.3 and 35.0 percent. using similar sampling methods. Future research intent on utilizing E-mail as a survey methodology should anticipate such high rates of faulty E-mail addresses. Also, it is possible for individuals' electronic mailboxes to reject messages from unknown sources even before the recipient learns of
the message, thus filtering out not just 'electronic junk mail' but also legitimate research requests (Lee, 1996).

Some have reported overall response rates to E-mail surveys as high as 75 percent (Kiesler and Sproull as cited in Sheehan and Grubbs-Hoy, 1999). Such high response rates are as much a function of a) the sampling unit’s demographic characteristics and b) the subject matter of the survey, as they are of astute methodological practices. Others have found that the typical response rate for single contact E-mail surveys is around 28.5 percent (Schaefer and Dillman, 1998). The current study’s rate of response to the direct solicitation compared quite favourably at 57.8 percent, especially when one considers the rather sensitive subject matter of the problem gambling topic and the absence of inducements to participate.

Many of these other studies apparently offered their participants some kind of incentive. In some cases it was as modest as postal stamp reimbursement (Sheehan and Grubbs-Hoy, 1999), as innovative as Smith’s (1997) offer to list company logos on a web page or as direct as Comley’s (1996) £2 per completed survey. This study of problem gamblers did not offer any such inducements. Those returning their surveys by mail paid their own postage and all potential participants were directed to the Gambling Study Info Site where it stated “...it is impossible to guarantee that your participation will necessarily result in direct benefits to you”. Had incentives been offered, perhaps the rate of response by direct solicitation recipients might have been even higher.

Schaefer and Dillman’s (1998) overall E-mail rate of response was an impressive 58 percent, but they surveyed a particularly research-friendly group: faculty at Washington State

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35 Had one of the surveys attached to an E-mail not been infected with a virus, this rate would have improved slightly to 59.2 percent. If one were to calculate the ultimate rate of return based on the number of letters of invitation, then the return rate is a more modest 23.9 percent (including the infected file).
University. Moreover, these researchers admittedly stated that their study did "not deal with a particularly sensitive issue" (paragraph 16). Thus, this study's response rate appears quite successful when compared to research efforts by Comley (1996), King (1994), Sheehan and Grubbs-Hoy (1999), and Smith (1997), where E-mail response rates respectively were reported as 13.5, 30.0, 24.0, and 11.0 percent.

Prior notification for participation in electronic surveys is an important requirement: indeed, some would suggest that it is imperative (Sheehan and Grubbs-Hoy. 1999). While individuals were asked to write to me if they wanted to participate (the standard protocol), Sheehan and Grubbs-Hoy (1999) employed a different strategy which may have increased participation in the current study had it been used. They requested that individuals write to the research team if they did not want to receive the survey; hence, they sent their survey to everyone who did not provide a non-participation notice. Still, that methodology seems quite intrusive and may have been the reason why several of their recipients strongly objected to being sent unauthorized surveys. In this study, there were no instances of recipient reprimand; considering the purpose of GAweb, I think it was best not to unduly upset any of the website's participants.

According to Schaefer and Dillman (1998), response rates to a study like this one might have been further improved with frequent reminders. For example, one might have been more aggressive in asking for a reply to the initial direct solicitation note, rather than leaving the responsibility with the individual to respond. However, given that there is a fine line between being eager to enlist participants and being a nuisance, I decided early on to err on the side of respect and caution. Many GAweb participants were actively dealing with exceptionally difficult circumstances, and the last thing they needed was an over-zealous researcher bothering them. The following exchange between myself and a potential direct solicitation participant is illustrative
of this point. On September 10 this person sounded quite keen to participate in the study:

"I am interested in any way I can help others and myself. So if you can send me some info or whatever, we can get started. I have been spending some of my time riding the gambling buses trying to let people know about what is in store for them once they get there. You wouldn't believe how many people want to stop, but they just keep boarding the buses. In my informal survey they wish that there was someone on sight (at the casinos themselves) to help them. Either to barr them from coming in or to help them find a meeting place or just anything. With all the so-called services these dens say they provide, the one needed most isn't offered. If you are interested in any of my informal findings just let me know. Thanks for your letter and I hope to hear from you soon."

An E-mail note was sent to this person along with the survey the next day; after several days without a response, follow-up notes were sent on September 17 and again on October 25. On November 6, the following reply was received:

"Dear Gerry, I am sorry that I haven't been able to get back to you sooner, but I am now homeless and it's a little bit harder to get things like that in order. Well, I don't know what I can do to help with your survey now so thanks for your interest, but I am kinda in a hard place right now. I hope your survey includes people and subjects like mine. I have been reduced to going to a day labour camp and doing all kinds of very hard manual labour jobs just to make 20 or 30 dollars in a day. I stayed at a shelter in [name of city] two nights ago but couldn't get in Friday, so I stayed down by the river. As I am writing this it doesn't seem like reality, but it really is. Anyway, thanks for your E-mail but I don't think I can help you; I do hope you help somebody, though its too late for me. Thanks for your interest."
My reply was as follows:

_Dear [name]: Thank you so much for your note. Clearly the study is not nearly as important as the challenges you now face. I'll try to find a way to incorporate somehow, the kind of information you have provided me with as a way of letting people know how devastating things can become. I wish you speedy resolution of your problems. good health and happiness._

A subsequent note to this person dated February 12, 2000, remains unanswered at the time of printing.

With regard to reminder letters, these have improved response rates in some studies by as much as 25 percent (Selwyn and Robson, 1998; Sheehan and Grubbs-Hoy, 1999). In this study, six of the 50 participants (12 percent) apparently acted in response to reminder notes. Elsewhere, reminder letters made very little difference (Comley, 1996).

Response times have also been hastened by E-mail administered surveys (Smith, 1997). For example, Sheehan and Grubbs-Hoy (1999) state that in their survey "more than half of the responses had been returned by the end of the second day that the survey was in the field, with two-thirds of the responses returned by day four of the collection" (paragraph 45). Response times were even quicker in the current study; nearly two-thirds responded within two days and just shy of three quarters had returned their surveys within four days.

To publicize her study, Smith (1997) utilized what she termed as "windows of opportunity" to recruit participants. She noted that interest increased each time she posted a note on various electronic bulletin boards calling attention to her study. In this study, with the exception of the very first note, the same kind of reaction to the broad solicitation notes (posted towards the beginning of each month starting in August, 1999) was not observed. While the
discourse at GAweb was closely monitored from May, 1999, until the end of December, 1999 (937 pages of printed text), I refrained from entering into active discussion. Perhaps, if I had been viewed as a more active participant-observer at this site, rates of participation might have increased. On one occasion, a GAweb visitor publicly questioned the study’s motives (as part of the general discussion); it is not known how many others shared this person’s concerns. Clearly, confidentiality was of paramount importance for many. Several who wrote requesting the survey specifically stipulated that they wanted to ensure that their identities would not be revealed. On the other hand, it was interesting to observe how others at GAweb openly encouraged participation in the research study.

**Research Procedures and Measures**

This study analyzed self-report data, which were voluntarily provided by visitors to an online support group for problem gambling. The survey (Appendix E) included a series of questions to capture:

- demographic information (gender, age, educational level, residential location [urban/rural and name of country], marital, employment and socioeconomic status);
- details of problem gambling via the completion of the ‘South Oaks Gambling Screen’ - SOGS (Lesieur and Blume, 1987), a widely used twenty-item screening instrument which has been scientifically evaluated for its validity and reliability (see next section);
- a series of questions about each participant’s concurrent and past efforts to obtain help for their gambling concerns;
- a series of questions pertaining to participants’ use of GAweb: how long have they been visiting this website? Did they post notes there? If so, over what duration and with what
frequency?; and

- for those who agreed to participate to a supplementary interview via E-mail, questions regarding what they liked most and least about GAweb and whether their use of this resource had any impact upon their gambling behaviour.

**Definitions and Measurement of Key Variables**

This section discusses how the research questions were addressed through the survey. One term which was common throughout the research questions was 'problem gambler'. Even though the solicitation notes were clear in their instructions that the survey was only intended for problem gamblers, some family members still indicated their interest in participating. In the end, they were given some background about the study and why only problem gamblers could participate. They were then thanked for their interest but not invited to participate.

In order to ensure that participants did indeed satisfy this problem gambling criterion, they were asked to complete an instrument known as the South Oaks Gambling Screen (Lesieur and Blume, 1987) as part of the overall survey (questions 11-26). The SOGS, as it is known, has been commonly used in research studies from around the world and is available in numerous languages (Stirpe, 1995). Most problem gambling studies in North America have used the SOGS to establish the existence of the disorder (Volberg, 1997). Essentially, it assesses “risk factors associated with the development of gambling difficulties in the population” (Volberg, 1997, paragraph 28) and is based on diagnostic criteria found in the DSM-III (American Psychiatric Association, 1980). The SOGS has the added advantage that it can be self-administered by problem gamblers (Spunt et al., 1998).

Validity for the SOGS has been established by cross-checking scores against counsellor's
independent assessment scores, family members’ assessments and scores from the DSM-III diagnostic criterion (Lesieur and Blume, 1987). Reliability was established through two procedures: an internal consistency check, yielding a Cronbach’s alpha of .97, p<.001; and through a “test-retest correlation using a dichotomous classification of pathological or non-pathological”, with an alpha score of .71, p<.001 (Ibid. page 1186). That being said, the SOGS’ accuracy has been best with individuals who have current problems and who are associated with some form of problem gambling treatment service: some evidence suggests that lifetime problems are overestimated by the SOGS (Volberg, 1997). Numerous baseline and replication studies have contributed to the development of the SOGS (for a complete description, see Volberg, 1997).

Consistent with the SOGS’ cutoff score for inclusion as a ‘pathological gambler’ and based on advice from one of its authors (H. R. Lesieur, personal communication, August 9, 1999), only those with a score of five or higher were included in the data analysis. This resulted in one survey being deleted from the data set. The maximum score on the SOGS is 20.

Research question one asked: When problem gamblers who utilize an Internet support group avoid face-to-face treatment programs and/or self-help groups, is it because they fear being stigmatized? ‘Feeling stigmatized’ was measured by questions 30 and 34. Item 30 asked for yes/no responses to the following series of questions: “Would you say that you ever avoided going to a face-to-face GA meeting (or another problem gambling self-help group) because a) you were concerned about what others might think of you if they found out, b) you had concerns about confidentiality, c) you did not want to make a commitment and d) you would not feel comfortable telling personal information to a group of people?” Question 34 asked the same series of questions with regard to avoidance of face-to-face professional counselling or specialized treatment. These reasons that participants might avoid participating in the stated
forms of recovery are based on Goffman’s (1960) seminal work on stigma (discussed in Chapter 5).

Research question two asked: Does the amount of exposure to an Internet support group make it more likely that the problem gambler will participate in a program of recovery? ‘Amount of exposure’ was measured by question 36 which asked about participants’ frequency of visits to GAweb. ‘Participation in a program of recovery’ was measured by two questions. Question 37 asked “How often would you say you have posted notes?” This item was included as a measure of participation since posting notes is a more active form of participation than simply reading others’ postings. Question 39 asked: “Has your exposure to GAweb increased the likelihood that you would seek additional help as part of a program of personal recovery if needed in the future?” It went on to specifically ask about the following kinds of help: a) continued GAweb participation, b) other Internet self-help, c) attendance at face-to-face GA, d) other face-to-face self-help and e) face-to-face counselling/treatment.

Research question three asked: Does ‘lurking’ at an Internet support group increase the probability of disclosure of gambling problems? Lurking is the term given to those individuals who tend to visit a particular website, such as an online support group, and who do not typically post their own notes for others to read; they merely read the posts of others. The extent to which participants engaged in lurking behaviour at GAweb was established through question 37 which asked: “How often would you say you have posted notes?” Probability of disclosure of gambling problems was addressed by survey item 38 which asked: “Would you say that the opportunity to secretly read others’ postings at GAweb has increased the likelihood that you have or will: a) continue to participate, b) post notes, c) reveal personal information, d) seek additional forms of Internet help and e) seek additional forms of face-to-face help?”
The final research question asked: **Are demographic characteristics associated with the issues being addressed in this study?** Demographic variables (gender, age, educational level, residential location, marital, employment and socioeconomic status) were measured from responses to questions one through 10. Additional descriptive information was found through the series of SOGS questions (11 to 26), information regarding the frequency of attendance and extent of participation at GA meetings (questions 27 to 30), and information regarding the frequency of attendance and extent of participation at professional counselling or specialized treatment programs (questions 31 to 34). This question will be addressed insofar as demographic variables were related to the first three research questions. In this way, the chapter which follows will not have a separate section concerning this research question.

**Qualitative Data**

In an effort at triangulation to ensure the “trustworthiness” of the study’s overall findings (Lincoln and Guba, 1985), two different sets of qualitative data were analyzed in addition to the quantitative data. These include: 1. comments made by participants in response to open-ended questions in the survey itself; and 2. comments provided by 25 participants who responded to the three supplementary survey questions.

**Data Analysis**

The quantitative data were analyzed using a variety of approaches and statistical tests: SPSS Version 9.0 for Windows was used to organize the data. Demographic data were outlined

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36 In one instance, I have quoted an individual who was not a participant in the study (the homeless gentleman); he did nevertheless, indicate his desire to see his situation highlighted in order to help others.
using descriptive statistics such as frequencies and cross tabulations. Relationships between variables were investigated using correlational coefficients (Phi for dichotomous, Spearman's for rank order and Pearson's for interval variables), and where required, Chi-Square and t-tests were used respectively for categorical and interval data. Exact values of significance have been presented wherever the alpha level is $p < .05$.

In terms of the qualitative analysis, the goal was to “locate patterns or themes that [were] embedded in the data” (Rothe, 1994, page 130). The method used to generate rich descriptions of participants’ comments followed a standard process regarding qualitative analysis. First, the data were read in their entirety to capture their essence. In the next reading, key content areas were identified from which key words/phrases were generated to be section titles. A third reading of the data included the highlighting of key words, phrases or ideas which were then grouped into the aforementioned section titles. This led to the development of several emergent themes; the data were then read again to investigate for overlapping themes, to ensure consistency of the themes, and to consider the presence of unique or conflicting comments which otherwise did not fit into the schema.

Generally, this method followed a grounded theory approach (Glaser and Strauss, 1967) which “both describes and explains the system or behavior under study and consequently is a methodology for developing theory that is grounded in data systematically gathered and analysed” (Cutcliffe, 2000, page 1477). While this study concerned itself with understanding and possibly explaining the reasons why some individuals benefit from online assistance, I approached this task “in the absence of an a priori conceptual framework or hypothesis” (Wimpenny and Gass, 2000) which is a hallmark of grounded theory.

* * *
This chapter examined the methodology used in addressing the research questions of this thesis, how the sample was obtained and how the data were analyzed. The next chapter presents the results of the study.
Chapter 8 - RESULTS

This chapter presents the quantitative survey results derived from 50 individuals who participated in this study followed by the qualitative data which are based on: 1) comments made by 28 participants in response to open-ended questions in the survey (primarily in response to question #40) and 2) information provided by 25 participants who chose to respond to the supplementary E-mail interview. In total, 41 participants provided qualitative data.

The chapter begins with a look at the characteristics of the participants in the study and will then proceed to examine the data as they pertain to the study’s four research questions. The fourth research question on demographic influences will not be dealt with separately but rather in relation to the first three research questions; in other words, after each of the first three questions, there will be a section on demographic associations. The chapter will conclude with a summary note.

Description of Participants

Participants were a well-educated and socially stable group; complete details are found in Tables F-2 to F-5 (Appendix F). The sample was almost evenly divided according to gender (52 percent male). The mean age of women was 40.9 years and for males it was 45.7 years (overall Standard Deviation = 10.17 and a Range of 41 from 23 to 64 years) but this difference in mean age was not statistically significant (t=1.62; df=44; p=.111).

Men reported a higher standard of living than women ($X^2=6.27$, df=2, $N=49$, p=.044) and 74 percent of the sample reported being married or in a common law relationship. Women in this study were more likely to have reported themselves as never married/separated/divorced or widowed than men ($X^2=7.51$, df=1, $N=49$, p=.006). The mean number of people living in an average participant’s household was 3.1 (Standard Deviation = 1.39, Range = 7).
Eighty-two percent attended a post-secondary educational institution at some point, and of that group 48.8 percent earned a college diploma or university degree. Seventy-four percent were employed full-time and 64.0 percent reported their employment as being at an executive, managerial, professional or self-employed level. Sixty-two percent stated that they lived in larger (40,000+) urban centres. and 74.0 percent reported themselves as being American. Participants' mean score on the SOGS was 13.98 (Standard Deviation = 3.07 with a Range of 13 from 7 to 20), which is indicative of serious gambling problems (at some point in their life). There was not a significant difference in the mean SOGS scores by gender - men (14.2) and women (13.7).

It is worth remembering that these participants volunteered for this study; therefore, one should keep in mind the issue of selectivity when considering the results. In order to better understand how their demographic characteristics compare with problem gamblers randomly drawn from a community sample, the following information from The Prevalence of Problem Gambling in Prince Edward Island Study (Doiron and Nicki, 1999) has been used since it was conducted at about the same time as the current study. Problem/pathological gamblers (minimum SOGS scores of 3) in the PEI study were 67 percent male, 42 percent married, 14 percent unemployed and 25 percent had an income of less than $30,000. In addition, 38 percent were under the age of 30 and 22 percent had less than a high school education. These findings highlight how participants in my study were more likely to report being female, married (or common law) and employed. In addition, only eight percent were under the age of 30, only 10 percent stated their standard of living was below average and only eight percent indicated they had a high school diploma or less in the GAweb cohort.

Table 6 provides information regarding face-to-face treatment and self-help utilization by participants in the GAweb study. The first row refers to help received exclusively from Gamblers
Anonymous (GA); the second row refers to help received exclusively from specialist treatment providers; the next (split) row refers to help received from both GA (top portion) and specialist treatment (bottom portion); the bottom row refers to those who did not receive any face-to-face help whatsoever. Overall, 80 percent reported attendance at some form of face-to-face intervention (GA and/or treatment); the vast majority of whom indicated they had been active in these programs within the past 2 months and that their participation levels could be described as "extensive".

Table 6.

<table>
<thead>
<tr>
<th>Type of Help Sought</th>
<th>% (n)²</th>
<th>Tenure # months</th>
<th>% Active Within Past 2 Months¹</th>
<th>% Extensive Participation¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA alone</td>
<td>40 (20)</td>
<td>8.0</td>
<td>54.5</td>
<td>34.0 (17)</td>
</tr>
<tr>
<td>Treatment alone</td>
<td>0 (0)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Both GA and Treatment</td>
<td>40 (20)</td>
<td>34.5</td>
<td>68.8</td>
<td>32.0 (16)</td>
</tr>
<tr>
<td>Both GA: No GA / Treatment Help</td>
<td>20 (10)</td>
<td>34.5</td>
<td>68.8</td>
<td>32.0 (16)</td>
</tr>
</tbody>
</table>

¹percentages are based on total sample of 50 participants; (numbers are in brackets)

With respect to face-to-face self-help groups, there is strong evidence that GAweb participants also sought help from GA: overall, 80 percent reported they had been affiliated with GA at some stage of their life. Of this group, 82.5 percent had been actively attending face-to-face meetings within two months of their participating in this study. The median length of GA
affiliation (as determined from commencement to the most recent meeting\textsuperscript{37}) was 23 months. The GA-alone group (versus those who attended both GA \textit{and} treatment) had a higher proportion of new members and therefore, had a lower median value regarding tenure. There was an extraordinary variation regarding GA tenure (Standard Deviation = 99.97 with a large Range of 501 months) which was a function of several who had exceptionally long GA affiliations (to over 41 years). As a measure of their enthusiasm and activity level, 72.5 percent of all GA attenders reported extensive participation with the self-help program.

While there were many instances of participants attending GA without seeking treatment, there were no instances of individuals attending specialist-delivered treatment without also attending GA. Overall, 40 percent availed themselves of specialist help through treatment programs and of treatment attenders, only about 40 percent (16 percent of the total sample) indicated that they had been active with such a program in the two months prior to their participation with this study. The median length of treatment affiliation (as determined from commencement to the most recent meeting) was 18.5 months. As with the GA participation, there was a large variation in these responses (Standard Deviation = 78.93 and a large Range of 281 months). Eighty percent of those who had attended treatment (about a third of the entire sample) stated that they participated extensively with the program.

Twenty percent of the sample \textit{did not attend either} GA or treatment. This group tended to be younger (mean age of 37.3 versus 44.9 years; $t=-2.182; df=44; p=.035$), was mostly

\textsuperscript{37} It is important to note that this does not necessarily indicate continuous ongoing participation with GA; merely, an affiliation which began at some point and continued to some more recent point in time. During that period, participation may have been continuous, sporadic or some hybrid of these. Even if an individual did not have fairly continuous participation, this statistic does suggest that one had reason to engage in a program of personal recovery with attendance at GA at some stage and that some incentive had continued to operate as suggested by their ongoing attendance. The same assumptions have been made with the corresponding statistic regarding specialist treatment affiliation.
comprised of women (70 percent) and had a slightly lower SOGS score than the others averaging 13.2 (versus 14.2). However, they did not differ significantly from the remainder of the sample on any demographic characteristic other than age.

Treatment attenders were just as likely to be female as male, but GA attenders were slightly more likely to be male (57.5 percent). When treatment attendance was controlled for, the rate of GA attendance differed between men and women but did not quite reach statistical significance ($X^2=3.28$, df=1, $N=30$, $p=.07$). Males tended to have longer tenure in the GA program (mean number of months were 86.1 versus 20.7; $t=2.099$; df=37; $p=.043$). Generally, those who were 40 years of age and older were more likely to report extensive participation at GA and/or treatment than those under the age of 40; specifically, those who did not attend GA tended to be younger with a mean age of 37.3 years (versus 45.3 for extensive GA participants; $t=2.26$; df=35; $p=.030$); for those who did not attend treatment, their mean age was 38.9 years (versus 47.6 for extensive treatment participants; $t=2.85$; df=38; $p=.007$).

With regard to those who responded to the broad solicitation and those who were recruited via the direct solicitation method, the two groups were undifferentiated in terms of demographic characteristics with the exception of the mean number of cohabitants for each group. Those responding to the broad solicitation process had a greater number of cohabitants ($\bar{x}=3.9$) versus those who responded to the direct invitation to participate ($\bar{x}=2.85$) ($t=2.22$; df=47; $p=.031$).

While 80 percent of the overall sample agreed to participate in a supplementary E-mail interview, only 50 percent chose to comment in that part of the study. These two groups (supplemental responders versus non-responders) did not differ in any significant way.

In summary, participants were a well-educated, socially stable group who were almost
equally divided by gender and with a mean age of 43.3 years. They tended to reside in larger urban centres (62 percent) and to come from the United States (74 percent). As a group, their problems with gambling were quite substantial; the average SOGS score was 13.98 and 80 percent reported attendance at some form of help. The average length of GA affiliation for attenders was 59.3 months; similarly, treatment affiliation was 49.2 months for attenders.

Research Question #1

Research question #1 asked: When problem gamblers who utilize an Internet support group avoid face-to-face treatment programs and/or self-help groups, is it because they fear being stigmatized?

Despite the high rate of self-help and treatment affiliations (described above), 78 percent indicated that at some point, they avoided going to a face-to-face self-help group and/or a specialist treatment service. Seventy percent of the entire sample stated that this was due to a range of reasons that seem related to stigma. These reasons include: concerns about what others might think if they found out; concerns about confidentiality; they did not want to make a commitment for ongoing involvement; and, feelings of discomfort at the prospect of having to disclose personal information to a group of people. Participants could check up to six reasons

38 The other four respondents (eight percent of the entire sample) exclusively stated that their reasons for avoiding GA and/or treatment were either due to “inconvenience” or “other reasons”: these might have been related to stigma, but this could not be verified.

39 Another reason to explain avoidance behaviour was also put forward but it might be argued that it was only indirectly related to stigma: that particular item asked about inconvenience (from scheduling to child care to transportation issues) which may or may not have been due to stigma constructs (such as ‘information management’ and the need to conceal personal information). Participants could also self-identify reasons for their avoiding outside help (or simply state “other”), but this did not occur nearly as often. Only about 26 percent of the entire sample indicated an “other” reason on questions 30 and 34. Two additional participants cited this as their sole reason for their avoidance of help-seeking. If indeed it was related to their need to conceal personal information or some other element of stigma, then the percentage of the sample who would have experienced avoidance of outside help due to stigma-related reasons
why they might have avoided GA or treatment, but only those four listed above were thought to directly relate to stigma. Using the responses to the above four questions concerning stigma, a participant’s ‘stigma score’ could thus be established.

Table 7 presents data describing each of the reasons for avoiding help: percentages reflect the number who expressed an affirmative opinion from those who had avoided treatment and/or self-help for some reason (n=39). The first four rows describe avoidance of help-seeking due to stigma while the remaining two rows are more generic; however, in certain circumstances, these too could have some relationship with stigma.

Table 7.

<table>
<thead>
<tr>
<th>Reasons for Avoidance of Face-to-Face GA/Treatment</th>
<th>GA(^a) % (n)</th>
<th>Treatment(^a) % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerned about others’ opinions</td>
<td>61.5 (24)</td>
<td>28.2 (11)</td>
</tr>
<tr>
<td>Concerns about confidentiality</td>
<td>35.9 (14)</td>
<td>23.1 (9)</td>
</tr>
<tr>
<td>Did not want to make a commitment</td>
<td>56.4 (22)</td>
<td>38.5 (15)</td>
</tr>
<tr>
<td>Discomfort about personal disclosure</td>
<td>46.2 (18)</td>
<td>38.5 (15)</td>
</tr>
<tr>
<td>Inconvenient</td>
<td>51.3 (20)</td>
<td>33.3 (13)</td>
</tr>
<tr>
<td>Other reasons</td>
<td>20.5 (8)</td>
<td>25.6 (10)</td>
</tr>
</tbody>
</table>

\(^a\)Percentages reflect those expressing an affirmative opinion out of the 39 who indicated they had avoided treatment and/or self-help.

Generally, participants were more likely to report avoiding GA as opposed to treatment. However, this was more likely a function of the larger number who made efforts to attend GA (versus treatment). In this way, the actual numbers who avoided GA and treatment should probably not be viewed as a statement about the relative merits of these two interventions.

would increase slightly to 74 percent.
Common reasons for avoiding GA include concerns about others' opinions, commitment and inconvenience. The most frequently mentioned reasons for avoiding treatment were concerns about commitment and discomfort related to the process of personal information disclosure. A strong positive correlation exists between the number of reasons an individual gave for avoiding face-to-face self-help group meetings and avoidance of face-to-face treatment programs (τ = .69; p = .000).

The total number of reasons cited by participants for avoiding GA and/or treatment due to stigma (questions 30 and 34) was found to be greatest amongst those who never received help. The mean number of these 'stigma scores' was 2.16 for the group who only attended GA, 2.50 for the group who attended both GA and treatment, and 4.22 for those who did not attend either. Analysing with t-tests, the contrast in mean scores was greatest between the no assistance group and the GA-only group (t = -2.096; df = 26; p = .046). Further analysis revealed that those who stated that their GA affiliations were 'extensive' had lower stigma scores than other GA attenders (without extensive affiliations) and non-attenders. Respectively, these mean scores were 1.79, 3.90 and 4.22. T-test results were as follows: between extensive and non-extensive GA attenders (t = -2.39; df = 36; p = .022) and between extensive GA and no assistance groups (t = -2.77; df = 35; p = .009).

For the most part, there were no significant differences between men's and women's avoidance of face-to-face treatment and/or self-help. One variable, however, was statistically significant: women's avoidance of GA because it was inconvenient (X² = 4.31, df = 1, N = 39, p = .038). Often this was due to the lack of a GA meeting in the participant's home town.

In summary, it appears that stigma was related to the fact that a majority (70 percent) of participants avoided seeking help for their gambling problems. A strong connection was found to
exist between those who appeared to have the greatest concerns about stigma and those who were most likely to have avoided any kind of assistance (GA or treatment).

Research Question #2

Research question #2 asked: Does the amount of exposure to an Internet support group make it more likely that the problem gambler will participate in a program of recovery?

Amount of exposure to the Internet support group GAweb, was measured by the length of time an individual had visited the website as well as the frequency with which they visited. These variables were analyzed for possible relationships with other variables indicative of recovery activities. Recovery-oriented variables included 1) the likelihood of posting notes at GAweb and 2) one’s intention of participating in ongoing recovery programs as articulated in question 39 of the survey (including: continued GAweb and/or other Internet self-help participation, attendance at face-to-face GA, other face-to-face self-help and face-to-face counselling/treatment).

A significant relationship existed between the frequency of participants’ visits to GAweb and the likelihood that they would post notes at that site (\( r_s = .41; p = .004 \)). Tenure at the website was also related to the likelihood that participants would post notes, but this relationship was not quite as strong (\( r_s = .29; p = .048 \)).

With regard to question 39 from the survey, the vast majority stated that their exposure to GAweb had increased the likelihood that they would continue returning to that particular website (86 percent), that they would seek out additional forms of Internet self-help (76 percent) and that they would attend face-to-face GA meetings (78 percent). While a sizeable proportion also
agreed to seek out other *face-to-face* self-help groups and counselling/treatment services. Those percentages were considerably smaller (respectively, 52 and 50 percent).

Women in this study were much more likely to be new to GAweb than men: 72.7 percent had less than two months affiliation with the online support group. This finding was statistically significant ($X^2=6.94$, df=1, $N=48$, $p=.008$). Despite being much newer to GAweb, women indicated that they visited as often as men and posted as often. They also indicated that they were just as likely as their male counterparts to: 1) continue attending GAweb; 2) seek out other forms of Internet self-help; 3) attend face-to-face GA meetings; 4) attend other forms of face-to-face self-help groups and 5) to seek face-to-face counselling/treatment.

As Table 8 indicates, there were only three statistically significant relationships with regard to who was most likely to seek out *face-to-face* self-help groups or treatment services as a result of their exposure to GAweb: those with lower level occupational groups (as opposed to executive levels) were more likely to attend face-to-face self-help groups (other than GA) as a result of their experiences at GAweb; individuals were also more likely to seek out such face-to-face self-help groups if they had not completed college or university; and participants who resided in communities with fewer than 40,000 inhabitants were more likely to attend specialist treatment as a result of their participation at GAweb in contrast to those living in larger urban centres. All other remaining demographic variables were tested and found to be not statistically significant in this regard.
Table 8.

<table>
<thead>
<tr>
<th>Relationships Between Demographic Variables and Likelihood of Seeking Face-to-Face Help (other than GA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Variable</td>
</tr>
<tr>
<td>Occupation (managerial/professional level)</td>
</tr>
<tr>
<td>Education (diploma/degree attainment)</td>
</tr>
<tr>
<td>Community type (large urban vs. other)</td>
</tr>
</tbody>
</table>

In summary, the vast majority of participants clearly indicated that as a result of their exposure to GAweb, they were more likely to participate in future efforts of problem gambling recovery, especially through the continued use of GAweb and other online forms of self-help and attendance at face-to-face GA meetings. In addition, a strong correlation was found between the frequency of visits participants made to GAweb and their posting notes at that website.

Research Question #3

Research question #3 asked: **Does ‘lurking’ at an Internet support group increase the probability of disclosure of gambling problems?**

It was originally thought that individuals who predominantly lurked at a self-help website might be distinctly different from those who actively contributed to the discourse through the posting of notes. However, nobody knows for sure just how many individuals might be lurking at any given time at an Internet website (like GAweb). Indeed, it seems likely that there are people who periodically post messages at GAweb and who also engage in lurking behaviour. It appears that these are not mutually exclusive categories. This question thus becomes: how seldom do
individuals have to post in order to be classified as lurkers?

Table 9 presents data which shows that in a majority of cases, participants reported that the opportunity to engage in lurking behaviour increased the likelihood of their disclosing gambling problems in a variety of ways. Percentages were as follows: through their continued participation at GAweb (67.4 percent); the posting of notes (73.5 percent); the revealing of personal information (53.2 percent); seeking more Internet-based help (64.6 percent) and seeking face-to-face help (54.2 percent). The degree to which participants had previously posted notes at GAweb did not appear to impact upon their responses to this question: both frequent and infrequent posters appeared to have appreciated the benefits of lurking.
Table 9.

<table>
<thead>
<tr>
<th>Frequency of Postings</th>
<th>Continued Participation</th>
<th>Post Notes</th>
<th>Reveal Personal Info</th>
<th>Seek More Internet Help</th>
<th>Seek More F2F Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Often 20+ times (n=7)</td>
<td>8.2 (4)</td>
<td>8.2 (4)</td>
<td>8.2 (4)</td>
<td>8.3 (4)</td>
<td>8.3 (4)</td>
</tr>
<tr>
<td>Often 11-19 times (n=4)</td>
<td>8.2 (4)</td>
<td>8.2 (4)</td>
<td>8.2 (4)</td>
<td>8.3 (4)</td>
<td>6.3 (3)</td>
</tr>
<tr>
<td>Occasionally 5-10 times (n=14)</td>
<td>18.4 (9)</td>
<td>18.4 (9)</td>
<td>12.3 (6)</td>
<td>18.8 (9)</td>
<td>16.7 (8)</td>
</tr>
<tr>
<td>Very Seldom &lt;5 times (n=24)</td>
<td>30.6 (15)</td>
<td>36.7 (18)</td>
<td>22.5 (11)</td>
<td>29.2 (14)</td>
<td>22.9 (11)</td>
</tr>
<tr>
<td>Never 0 times (n=1)</td>
<td>2.0 (1)</td>
<td>2.0 (1)</td>
<td>2.0 (1)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>67.4 (33)</strong></td>
<td><strong>73.5 (36)</strong></td>
<td><strong>53.1 (26)</strong></td>
<td><strong>64.6 (31)</strong></td>
<td><strong>54.2 (26)</strong></td>
</tr>
<tr>
<td><strong>Participant Said “No”</strong></td>
<td><strong>32.7 (16)</strong></td>
<td><strong>26.5 (13)</strong></td>
<td><strong>46.9 (23)</strong></td>
<td><strong>35.4 (17)</strong></td>
<td><strong>45.8 (22)</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0 (49)</strong></td>
<td><strong>100.0 (49)</strong></td>
<td><strong>100.0 (49)</strong></td>
<td><strong>100.0 (48)</strong></td>
<td><strong>100.0 (48)</strong></td>
</tr>
</tbody>
</table>

*percentages of valid cases: numbers in brackets

While it appears that the extent of previous postings were unrelated to participant's likelihood of engaging in disclosure activities, there were some other variables which were statistically related to these disclosure measures, as shown in Table 10.
A summary of the statistically significant findings in Table 10 follows. As a result of having the opportunity to secretly read others’ postings at GAweb:

- those who were most likely to continue to participate at GAweb were those whose occupational status was not reported as executive/managerial/professional and whose standard of living was considered to be average or below average;

- those who were most likely to not post notes in future were aged 40 and over and identified themselves as having an executive/managerial/professional or self-employed occupational status;
- those who stated that they were most likely to disclose personal information included participants reporting either a below average or average standard of living and those with less-extensive GA affiliations;
- those who were most likely to seek additional forms of Internet help, visited GAweb often, and of GA members, reported less extensive involvement in the GA program; and
- those who were most likely to seek additional forms of face-to-face help in the future had either a below average or average standard of living, they were more likely to identify themselves as not having an executive/managerial/professional occupation and to come from countries other than the United States.

Other variables were tested and found to not have significant relationships with the disclosure variables: these included gender, education, employment, the number of cohabitants, the type of community lived in, their SOGS score, tenure at GA and treatment and the degree of participation with specialist treatment.

In summary, most participants reported that the ability to lurk at a website like GAweb made it more likely that they would disclose information about themselves. Almost three-quarters said that lurking made it easier to post notes and over two-thirds indicated that they continued their affiliation with this website for the same reason. Certain demographic characteristics were statistically associated with certain forms of personal disclosure, for example, age and the posting of notes.

Qualitative Survey Results

As mentioned earlier, qualitative data were collected from two distinct sources: first, comments made by 28 participants (56 percent of sample) in response to open-ended questions in
the survey itself and, second, comments provided by 25 participants (50 percent of the sample) who responded to the following three supplementary survey questions:

1. What (if anything) do/did you like most about GAweb?
2. What (if anything) do/did you like least about GAweb?
3. Has GAweb made any difference in your gambling behaviour and please describe why you think that might be?

Those who chose to return their supplementary comments did not differ from non-respondents on any demographic or related characteristic. In total, 41 participants (82 percent of sample) provided some kind of qualitative information.

All direct quotations from participants will continue to be presented in italics. In some cases, I have deleted certain identifying words and have used generic replacements within square brackets; this was meant to ensure participants’ anonymity. Typographical mistakes have been corrected, as long as the intent of the participant’s statement was not changed as a result of the edit. Themes distilled from these data have been highlighted in bold font.

In addition to coming from many parts of the world, people who visit the GAweb online support group comprise a disparate group in terms of their therapeutic needs. Some already had successfully established an abstinent lifestyle while others were in crisis situations and experiencing deep despair when they came to GAweb. Some were interested in GAweb as an adjunct to other forms of face-to-face help while others were unable to locate assistance from within their local communities. As a result, many turned to the Internet as a primary means of finding help for their problems. For the most part, those already secure in their recovery reported only limited benefits of GAweb. These people typically provided assistance and advice to others. Those newer to recovery often reported that GAweb made significant differences in their lives.
With such diversity within the sample, it is easy to understand how there might be instances of conflicting viewpoints.

Many of the participants seemed to be very altruistic in their approach to GAweb and this study. Comments such as the following were frequently noted: “Please ask anything that may help others with a problem like mine” and “I am willing to help any gambler that is suffering”.

The issue of access to help was a dominant theme throughout this phase of the study. This basically involved two aspects: the convenience and availability of GAweb and issues of restricted access to face-to-face venues, either because of physical issues (like scheduling or lack of local services) or due to more emotional issues (like shame and embarrassment).

Ready access to GAweb involved time, place and person constructs. With regard to the first of these, people appeared to value the immediacy of contact with the GAweb service since it is operational 24-hour per day, 7-days per week, or “24/7” as some have termed it. Terms like “if and when”, “anytime” and “all day long” reflected this notion. Another told of her satisfaction with GAweb due to her hectic schedule: “I have very limited time because I am working full time and also working on my Masters [name of degree]. It seems that I am making my structured meeting times less and less, due to time constraints, but the GAweb always helps me through”.

Frequently, individuals were aware that they were at some elevated risk for having an urge to gamble. At times like these, the instantaneous support they could receive from GAweb was akin to a relapse prevention strategy. One participant put it this way: “Sometimes when I am feeling [vulnerable], it really helps to be able to read about people who are having the same struggles as me... it has helped me many times”. According to another: “If the temptation arises, there is instant help if I need it”.
The second aspect to ‘access’ concerns location or place: during the study, people connected to GAweb from around the world regardless of geography, availability of transportation or weather conditions: “When I visit my mum in the country and there is no GA meeting as it’s a small town, I can jump on her computer and have a meeting by myself”. Indeed, some participated in this study while vacationing from home: “I am on vacation [overseas] as I write this, but will be back home next week”, and “I am currently visiting my mother [where gambling is nearby] for a week. I am finding it very difficult to stay away from the machines. My last bet was [just a few months ago] and I was just browsing the Internet to find a meeting”. Others liked the opportunity to find help from: “The privacy of my own home”.

Finally, with respect to the personal constructs of access, many indicated that they did not attend face-to-face forms of assistance because of negative emotions they were experiencing (shame, anxiety and so forth): “Because of my profession and smaller community. I do not feel comfortable going for counselling in this area”. For others, GAweb provided them with a safe opportunity to commence the therapeutic journey: “Online just opened the door for me. I felt secure in knowing that if the urge comes, help is just a click of the mouse away. The posting place is a sharing centre of total anonymity where we can explore what we are feeling and not feel so all alone”. Interestingly, 8 of the 10 participants who did not attend any treatment or self-help provided qualitative commentary: of this group, five specifically mentioned the easy access associated with GAweb.

The issue of access was also referred to in relation to the difficulty in getting to GA

\[40\] In another example concerning geography, a participant from beyond North America did not understand English and relied on translation software to communicate; they clearly wanted to participate in the study but were not sure if this would be possible: “I want to participate in the study of your gamble addiction but am anxious for whether or not my idea communicates to you”.
meetings. Meetings were pre-scheduled by others and these sessions were too far away or too
difficult to attend due to transportation difficulties: "I live a fair way from the nearest GA
meeting, so GA on the web is important to me"; "We do not have GA meetings here. That is why
I sought assistance from the Internet and will continue to do so". Others stated that this was of
importance to them because of their employment: "I can post whenever I am on the net since I
work shift work. Most meetings have scheduled times that I cannot make".

Sometimes face-to-face meetings might not have taken place soon enough or often enough
and, hence, GAweb was used as a supplement to GA: "I like being able to click on this
anytime. I still go to 2 meetings a week at GA. but I find that this web site fills in the gaps": "It
is a good substitution for regular GA meetings at times when one is unavailable" and "I
regularly attend GA meetings, but using GA web helps me to get through the week more easily".

Some expressed apprehensions about GA meetings. For example, in contrasting GAweb
to GA, this participant stated: "You don't need to wait for a meeting... or worse.... have the fear
of feeling betrayed when you have revealed some innermost feelings". Sentiments like this, may
be important clues regarding why some may have trouble attending their first face-to-face
meeting.

Several mentioned that the ability to go back and read previous postings was beneficial
to them: "I like that you can go back and read previous posts. This really helps me a lot.... It is
therapy for me to just read what others are experiencing and then post my therapy and get
feedback". Another had this to say: "Even if there is nothing new posted since the last time I
looked (I go there 4, 5, 6 times a day) I can re-read the old posts and even go back years
because they keep archives and read what past people have written. As with reading anything,
you can read it over and over and usually gain something new each time".
Frequently mentioned was the idea of **not being alone**: “With my very first visit there, I was able to read about people that I could relate to. I was no longer feeling that I was alone with this problem”. For some seeking support, the **anonymity afforded by GAweb** made it possible to: “Share with others having the same problems, under conditions of relative anonymity, since this is a ‘shameful’ affliction and hard to admit to ‘regular’ people”. This was echoed by others: “The fact that you don’t have to reveal your identity (because this addiction brings a lot of shame and embarrassment too) is also nice - it is definitely a good, resourceful site for people like me who have this addiction”.

The sense of a shared community that many found when they visited GAweb, led to their **feeling hopeful**: “This website has helped me keep in touch with the fact that this is a disease and there is help out there”. A newer visitor had this to say: “I'm just starting the recovery phase and do believe that GAweb will help. It gives me some hope that there is an end to gambling”.

Some went beyond the issue of participation and made a connection between their level of **honesty** and GAweb’s **anonymity**: “Typing out your feelings is very therapeutic and sometimes the safety of the computer gives you the strength to look a little deeper and accept some things that you may not have been able to express with a therapist or group”. According to another: “What I like most is the feeling that I can be honest without suffering any immediate repercussions. I’m seriously at the point where I don’t think hiding is doing me any good, but at the same time I’m not ready for a local GA meeting. There’s only one in our city and it is held at a place where many of my wife’s relatives hang out. So I like the freedom of being honest in what I consider to be a safe environment”. In some cases, this honesty brought about deeper forms of communication as evidenced by these comments: “It also provides the opportunity to
develop relationships that are at times more intense and totally uninhibited than face to face relationships....” In short: “Online sharing is easier than in person” and from another: “I feel safe using GAw eb”.

Quite a number stated that they had no complaints about GAw eb: “What’s not to like?” posed one participant. However, several did comment that they saw a need for a ‘live chat’ version of GAw eb or minimally, a hypertext link to transport visitors directly to a real-time chat website for problem gamblers. A few participants mentioned other technical aspects of the site: some said that they had trouble getting through to GAw eb, that they experienced trouble sending postings, that their E-mail addresses would not show up and that there were too many monthly postings to read to stay current41: “Some postings are just too long - some people ramble and monopolize the page. I cannot access the site after the 15th of the month because the info has gotten too large for the display”.

Other comments concerned three distinct themes of criticism, each of which was more fundamental in nature than the above. First, several commented that they had concerns about some of the attitudes and opinions expressed at GAw eb. For example, one said “It’s hard to judge the sincerity of the people who are communicating there”; and from another: “I didn’t like the attitude of many of the male posters as they seemed to be analysing everything that you say and I didn’t go there for that”. Another went further by suggesting that some comments at GAw eb were hateful, but that he also had a plan for dealing with these situations: “I don’t like people who are very opinionated and racist... if a message annoys me or is uninteresting, I just

41 In December, 1999, the web administrator at GAw eb implemented a re-design of the site which addressed many of these issues. For example, one could simply choose to download postings for the most recent 24-hour period as opposed to downloading the entire month of postings. A chat room was also added to the site.
scroll down the page, take in the good stuff and leave the bullshit”.

Second, others spoke about their observations that the group who most frequented GAweb were not very accepting of new ideas and possibly new voices: “What I like least, so far, is the apparent ‘cliquishness’ of many of the posters: I get the feeling that people only want to hear a certain measure of the truth, and it better jive with what their own belief system is already telling them. This doesn’t actually bother me too much: no one has jumped on me yet. But I get the feeling that as a group (am I stereotyping already?). compulsive gamblers are very tense in recovery and ready to lash out at anyone with ideas that aren’t right out of the GA manual”. Another person put it this way: “Bickering and sniping about different views regarding cutting down or abstaining from gambling. There are hard core ‘GA is the only way to go’ types here, as well as the more moderate people just trying to quit for today”.

The following participant also addressed what she saw as a dogmatic stance and she was specific in her comment about the abdication of personal responsibility in many of the postings: “The same thing I like least about GA meetings - the overwhelming outpour of people thanking their "higher power" - this is a personal thing for me but I believe more people need to take responsibility for their own actions and not always believe it is up to some "higher power". I know this is a cornerstone of all this 12-step stuff but it is not for me and for many people I know. My problem is when people talk about a higher power as being something completely separate and apart from themselves as if they have no control and no input - what they do not realize or can not accept is that they are part of the higher power - it is within them - if it is there at all. This is more of a personal philosophy than a problem with the site itself however as we all know - you are what you eat! All of this talk can scare someone off who is not familiar with the 12-step process - so I see this as a problem”.
The final substantive criticism concerns the **website administrator's elimination of postings** that he deemed to be harmful. According to one participant: "*What I LEAST like {GAweb} is the fact that [the website administrator], or someone, erases some-postings, that may have some vulgar, or whatever they may think is not a good posting for the group...*I think every posting is a learning experience for all of us. I've said it reminds me how this illness gets worse, it's VERY progressive....Maybe the un-kosher person, may in fact come around and get into a GA meeting. Always remember 'bring the body and the mind will follow'. So when they pull someone's postings I think it is very wrong. Plus the so called bad posting will always be **RE-READ** by the writer, thus they can see how sick they may be, and maybe do the first step". It should be noted that no additional participants raised this criticism.

In spite of these problems, it seems clear that many participants found GAweb to be **very beneficial** to them. About 70 percent who expressed an opinion felt that the site had made a difference in their gambling behaviour. Some were very compelling in their testimonials like the following: "I really believe the GAweb saved my life. I had "bottomed out" and called my local mental health clinic - by law they are supposed to offer gambling counselling (part of the state gambling revenue pays for it). Well, I was told the gambling counsellor had just quit and there was no-one at the time. I frantically was searching the Internet for ANYTHING I could find and happened upon GAweb. I can't express enough how important and crucial I feel it has been in my recovery. I go there several times a day to read - I get so much strength and inspiration and perspective from everyone else. I also enjoy expressing my feelings and talking to others who totally understand what I'm dealing with. There is no GA in my area, so I go to private

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42 The issue of censorship was discussed at some length at GAweb in September, 1999, following an incident where several postings were deleted by the site administrator.
counselling and use GAweb. I have met some wonderful supportive people there and personally E-mail with three of them daily. It has been a God Send!”.

Another participant put it this way: “The site has made an enormous difference in my gambling behaviour because I was doing a lot of online gambling and it has given me an alternative to the online casino. I now spend all of that computer time reading, posting and corresponding with others who visit GAweb. When I do leave the house and the urge to go to the casino or buy a lottery ticket strikes I find myself thinking about what I have learned from GAweb and the people who have been helping me and I don’t want to let them (or myself) down so I can postpone the urge now and I have managed to stay clean.....one day at a time”.

Others suggested that they might not have been able to recover without GAweb: “If it wasn’t for GAweb I’m not sure I would have made it through the first couple of weeks after I told my wife that I had a problem and had lost all of our savings and all of our son’s college fund. I feel it helped me get the help I needed and gives me an area that I can express my true feeling and let out all of my frustrations about what is going on in my life”. Another participant put it succinctly: “I have found info to help me beat my problem that I would not have otherwise if it was not for GAweb”.

Some suggested that GAweb could provide other benefits which face-to-face approaches might not be able to accommodate; for example, to be used as part of their program of moderation. According to the following participant, he was not prepared to discontinue trips to Las Vegas; but GAweb helped him to cut down on gambling: “My gambling was formerly at a once or twice every week level at the local casinos, losing maybe $500/wk average or $26,000 per year. Now, I do not go to the local casinos anymore, and just go to Las Vegas maybe twice a year for maybe $2,000 loss per time average. Reading everyone else’s sharing is what helped, to
see how ridiculous it is to cause your own money troubles by throwing away your money at the local casinos. I am unable or unwilling to give up gambling entirely. I love LV too much. But I have been helped to control my illness with GAweb”.

Of the seven who stated that GAweb had not made a difference to their gambling behaviour, only one stated strongly that it had not helped: “GAweb has had no difference to my recovery in any manner”. Usually those who stated that GAweb did not make a difference felt that successful recovery had been initiated by other means. While stating that GAweb had not caused them to change their behaviour, the others either qualified their statements or made concessions to GAweb. They said things like:

- “I go to GA meetings regularly and that has allowed me to stop gambling. The website makes abstaining easier, but I don’t think I’d be gambling either way”;
- “My urge to gamble has lessened dramatically since I started taking Prozac...”;
- “It has not changed my feelings toward gambling since I joined GA in 1993. but I find that when I read the other people’s stories it does make me remember the hard times”;
- “I haven’t gambled for over 26 months now, so the site hasn’t changed my patterns. but it is one more tool in working my GA program so that I can continue to abstain and recover”;
- “Quite truthfully, I seem to be doing okay without visiting the site, but I know that I can slip at anytime and if I do, the majority of the people on that web site will understand and support me”; and
- “I have been free from gambling, thru GA, since before I started coming to GAweb, so it hasn’t made any difference in my gambling behaviour. Where it has helped me is a better understanding of the spouses of compulsive gamblers and for those who have a
hard time coming to, or staying in, GA. When people stop coming to our GA meetings, we rarely find out why they stopped”.

While not a consensus view, many suggested that GAweb was insufficient as a stand-alone intervention. This sentiment, which seemed to be felt by many, can be summed up in this participant’s words: “GAweb is a good tool, but it lacks the impact of face-to-face meetings. It’s tougher to hide problems when meeting personally, and GAweb gives you the opportunity to hide behind your computer without really recovering. I’ve noticed many people who have only visited GAweb and then post later saying they are still gambling but have yet to visit a GA meeting”.

However, others seemed less concerned in so far as they apparently view GAweb as a stepping stone to other programs like GA: “I think that GAweb will lead a lot of people to face-to-face GA meetings!”. There was a recognition that not everyone is ready to accept the principles of GA: “People are getting helped. These people include those who can’t/won’t go to GA, those who can’t go frequently. AND those who do go to GA”.

Some who came to GAweb with their recovery well established through GA, did suggest that they would have been better off had GAweb been available to them early on: “I have been in recovery for almost three years... Using the net for therapeutic purposes is fairly new to me, but I see great potential. I just wish I had found GAweb in my early days of recovery”.

Summary of the Main Findings

This study’s sample was well educated and socially stable. Seventy percent reported that they had avoided attendance at face-to-face self-help and/or treatment programs because of a variety of concerns primarily related to stigma. Non-attenders of either GA or treatment had greater concerns about stigma and were more likely to be under the age of 40 than were extensive
attenders. Those who participated extensively in GA had the least concerns about stigma.

Increased exposure to GAweb was related to a greater likelihood of participation in a program of recovery. Increased exposure to GAweb was also associated with the likelihood of continued participation at the website (86.0 percent), attendance at face-to-face GA meetings (78.0 percent) and the seeking out of more Internet-based self-help resources (76.0 percent).

Lurking was difficult to define since most participants posted notes at least a few times. Still, it appeared that the degree of posting notes at GAweb and the likelihood of engaging in disclosure activities were unrelated. A majority of participants, stated that there was a relationship between their ability to secretly read others’ postings and the likelihood that they would: continue to participate at GAweb (67.4 percent), to post notes (73.5 percent), to reveal personal information (53.1 percent), to seek other forms of Internet help (64.6 percent) and to seek other forms of face-to-face help (54.2 percent).

In the qualitative data, participants referred to the support and information found at GAweb, especially its immediacy, portability and ease of access. Participants also appeared to value the anonymity; that, in turn, seemed to make them feel safe and be more honest than in face-to-face situations. The ability to check earlier postings through the archives was also seen as a positive feature of this website.

As for the limitations, many reported that they did not have any concerns. Some did mention a variety of technical problems that have plagued the site and called for hypertext links to live chat locations. Some referred to the rather critical tone in the discussion at GAweb, the cliquishness and close-mindedness of some of the regular contributors and their unhappiness that postings are periodically censored by the website administrator. Some thought it was easier to be dishonest in online versus face-to-face support groups.
Seventy percent claimed that GAweb had positive impacts upon their gambling behaviour. These impacts included: new personal relationships; help in times of crisis; and maintaining abstinence because they did not want to let the group down. GAweb was also reported as helpful where the goal is non-abstinence. Even most of those who indicated that their problem gambling had been addressed via other forms of help, perceived beneficial effects with GAweb: for instance, helping to reinforce abstinence.

* * *

The next chapter interprets the findings presented above to suggest an explanatory model for online assistance to problem gamblers. This model, it is hoped, can be tested by subsequent research of online support groups for problem gamblers.
Chapter 9 - DISCUSSION

This chapter discusses the results of this study and presents a model that is based on my interpretation of these results. I will also discuss the implications of these findings with respect to future efforts in prevention and treatment. Afterwards, the limitations of this research will be considered as well as suggestions regarding new lines of enquiry. I will conclude with a few brief observations.

The Double Edge of the Technological Revolution

Western cultures have undergone tremendous social change over a relatively short time period. An examination of some of the key developments in this regard might be helpful to put the results from this study into context.

Like many countries, legalized gambling in Canada is a recent phenomenon. Casinos came to this country just a little over a decade ago and have since multiplied many times over; many other forms of gambling have witnessed similar patterns of exceptional growth. Federal and provincial governments readily promote and benefit from legalized gambling. Today's youthful generations are the first to: "Be exposed to such widespread and easy access to a variety of gambling venues, gambling advertising, and general social approval for an inherently risky activity that was once prohibited" (Stinchfield and Winters, 1998, page 172). The longer-term implications of such changes are yet to be known.

During this same period, computers have grown to become an integral part of society and have changed the patterns of communication thereby enabling individuals to gain access to others like never before. Computers have minimized the impediments to information and social support. Once again, the longer-term implications of these changes are yet to be fully understood.

No doubt, such fundamental changes are associated with a range of both negative and
positive developments. For example, on the negative side, Ladouceur et al. (1999) found increasing numbers of Quebecers to have serious (pathological) gambling problems: somewhere between 37,949 and 50.919 more individuals in 1996 than in 1989 (for a total of between 73,415 and 157,317 in 1996). The percentage of those problem gamblers who received help during this period remained low: in 1989 it was 11.4 percent and, in 1996, it was just 6.2 percent (Ibid).

While there may be reasons to explain why this phenomena is specific to Quebec (for example, culture), there is no reason to think that the situation is markedly different elsewhere in Canada.

However, on the positive side, individuals appear to be taking charge of their health concerns in new ways. This has prompted the Director of the American Self-Help Clearinghouse to state: "The number of both online mutual help networks and people participating in online 'groups' is increasing dramatically" (Madara. 1997, page 20). Therefore, just as the social and technological advances of the turn of the century have presented new challenges, they have also created a range of new opportunities. To some extent, this study has addressed both the positive and the negative sides of technological developments as they pertain to problem gambling.

A recent paper by Davison et al. (2000) utilized "social comparison theory" to explain the modern tendency towards online support groups. Succinctly, it suggests that: in times of uncertainty and elevated states of anxiety, people will want to congregate and compare ideas and reactions so as to support one another. This affiliative behaviour results when people are looking for reassurance and, under those circumstances, welcome others' advice more freely than ordinarily might be the case. However, the motivation to affiliate generally declines whenever there are embarrassing circumstances (Bien et al., 1993; Davison et al., 2000; Herman, 1993; North, 1998).

This may help to explain why so many people in need of assistance for their gambling
problems fail to seek treatment (Hodgins and el-Guebaly, 2000; Ladouceur et al., 1999; Marotta, 2000). Among the participants in this study, despite the fact that 80 percent attended face-to-face treatment and/or self-help for their gambling problems, 70 percent indicated that at some point, they had avoided such help for reasons which were related to stigma (concerns about confidentiality and so forth).

Interestingly, the Davison group found “strong correlations ... between indices of social marginalization (embarrassment, disfigurement, stigma, and life threat) and [online] support-group participation levels” (Davison et al., 2000, page 215); in other words, the busiest Internet-based support groups were those which were intended for the most stigmatizing of health conditions.

In the current study, participants who reported the highest number of indications of treatment or self-help avoidance due to stigma, were those who were most likely to have not attended any treatment or self-help (at least as of the time of participating in this study). Perhaps, there was something about an online service like GAweb which helped them to affiliate (as per the social comparison theory), where they had been uncomfortable engaging in a similar manner via face-to-face venues.

At this stage it is difficult to speculate about causation: did higher levels of concern about stigma keep people away from face-to-face treatments? Did levels of concern about stigma dissipate with the attendance at face-to-face treatments? Is there another, more accurate explanation for the relationship between help-seeking and degree of concern about stigma? More information is also needed to better understand what happens to problem gamblers when they avoid attending treatment or self-help groups: do their problems worsen? Even though there are not clear answers to these questions at present, the relationship between concerns about stigma and treatment and self-help group avoidance should not be ignored. In the meantime, it will be
important to find ways to improve upon this situation. Data from this study may form an important bridge to finding new solutions to these perplexing problems.

Certainly, many participants in this study provided qualitative information which suggested that the ease and immediacy of access to GAweb were integral to why they availed themselves of an Internet-based form of assistance. Many also went on to say how the issue of complete anonymity figured prominently in their decisions. Arguably, anonymity in face-to-face situations is not as complete or as guaranteed as it is with online groups where participants have much more control over both the method(s) utilized and the amounts of information they choose to disclose about themself.

A critical component of control in online environments is the ability that participants have to secretly and passively participate; lurking as it is generally known. In this way, an individual who reads others' notes may very well use them as a basis for self-reflection: 'is my gambling that serious?'; 'should I consider talking to somebody about my problems?'. The critical process of self-exploration need not involve anybody else; its commencement can be purely an individual matter in the online world.

This process of personal exploration can be expanded through online venues without having to disclose much information; certainly, much less than in face-to-face contexts. In online support groups, participants might engage in instantaneous online dialogue with others without identifying their name, gender or any other personal characteristic. In face-to-face (or even telephone) settings, participants' names might remain unknown, but many other features would stand a much greater likelihood of being communicated (for example, gender, age, race, level of anxiety and so forth). Some may believe that such inadvertent disclosures are too high a cost to engage in this self-reflection process and this may account for the relatively low rates of utilization
of treatment services and self-help groups by problem gamblers.

**Prochaska and DiClemente’s Transtheoretical Model of Change**

To better understand the issues raised by the data in this study, I have developed the Pathways Disclosure Model. This model is heavily indebted to Prochaska and DiClemente’s Transtheoretical Model of Change (Levesque, Prochaska and Prochaska, 1999; Prochaska and DiClemente, 1982, 1986) and essentially adapts their model to an online support context. Therefore, I begin with the Transtheoretical Model of Change before proceeding with the Pathways Disclosure Model.

The Transtheoretical Model of Change, which is described in Figure 1, is a staged-model for changing problematic behaviours that has been applied to a variety of addictions. Included in the model are those who are either not quite ready to take action regarding their addiction problems as well as those who are early into the stage of seeking assistance: they are respectively known as “precontemplators” and “contemplators”. Placement into these categories is a subjective experience, but is nevertheless helpful at identifying relative preparedness to change.

The Transtheoretical Model has been especially helpful in getting clinicians to better recognize that changing problematic behaviour is not an all-or-nothing process. Rather, it is a dynamic process that also involves external factors (Soden and Murray, 1997; Tucker, Vuchinich and Gladsjo, 1994). By using certain strategies (or “processes”) to better configure external circumstances to address the readiness of the individual to commence the change process, the likelihood of successful outcomes is increased. For example, a problem gambler’s motivation to seek help might be influenced as much by the accessibility of treatment or the presence of family pressure to obtain professional assistance (external factors) as it is to their desire to reduce
negative emotions like guilt and anxiety (internal factors). To complicate matters, availability and appropriateness of services may also be important external factors as to whether or not action is taken by the individual.

As can be seen in Figure 1, successful change usually consists of the progression from a precontemplative state through to contemplation, to action, maintenance and eventually the termination of an addictive lifestyle. While some progress through these stages in a linear manner, most experience cyclical patterns where relapses are frequently the norm; they can occur at any point in the change cycle.

Prochaska and DiClemente (1986) have found that there are 10 primary processes of change. Regardless of the type of problem, the most frequently utilized of these change processes, are helping relationships, consciousness-raising and self-liberation.

Unfortunately, “during the precontemplative stage, individuals use the change processes significantly less than people in any other stage” (Ibid. page 9). Historically, this may have been because in order to move from the precontemplation stage, individuals needed to engage in some form of personal disclosure with others through face-to-face, telephone or mail-based forms of communication. Since these practices involve some form of personal disclosure, they may inhibit precontemplators from acting.

Online forms of assistance like GAweb, open up new possibilities for precontemplators because interpersonal interactions can occur without personal disclosure also taking place. Therefore, it may be useful to incorporate into Prochaska and DiClemente’s paradigm, the concept that personal disclosure is a dynamic process. In an online relationship, personal information may be revealed in a way that the precontemplator is in complete control of the self-
Figure 1.

Transtheoretical Model of the Stages of Change (Prochaska and DiClemente, 1982)
disclosure process.

In this study, participants stated that they liked the opportunity to anonymously read others' postings - both recent ones and those in the archives. They could choose to do this at their own convenience (including scheduling and location) and as a result, there was a high degree of personal safety associated with this behaviour. Participants in this study also valued GAweb for helping with 'not feeling isolated'. Some used the website for social support even though their personal goals differed from others. For example, the moderation versus complete abstinence debate is usually a difficult. if not impossible undertaking in face-to-face settings; but because of the anonymity of the online environment, it might be less threatening to participants. Again, this is an issue that merits further research.

It would appear that this ability to anonymously ease into the process of self-exploration may be helpful for problem gamblers. For example, 73.5 percent of this study's sample stated that lurking increased the likelihood that they would disclose information about their gambling problems through the posting of notes for others to read. Almost two-thirds (64.6 percent) said that they would seek additional help through the Internet as a result of their being able to lurk. Perhaps of greatest surprise, 54.2 percent indicated that they would seek out face-to-face forms of help as a result. Therefore, many appear to approach GAweb as an important stepping stone in developing more comprehensive forms of assistance for their gambling problems.

There was a significant correlation ($r_s=.41; p=.004$) between the number of times a person visited GAweb and the likelihood that they would post notes. This was true for both men and women even though women generally were much newer to the website. It may be premature to state that as a result of being familiar with this website, participants are more likely to engage in recovery-oriented activities like posting notes. However, that idea should be given serious
consideration. Overwhelmingly, participants indicated that exposure to this website made it more likely that they would continue to return (86 percent), that they would attend face-to-face GA meetings (78 percent) and that they would seek additional help through the Internet (76 percent).

These observations have led me to think about the dynamic, staged process of disclosure as a continuum. On the one hand, and particularly as people first begin their process of discovery, there is probably very little that they are comfortable disclosing to others. With the creation of online support groups like GAweb, the participants can avail themselves of access to others’ experiences without having to declare to anybody else that they are embarking on this journey of self-appraisal. This provides them with an opportunity to learn firsthand that they share many things in common with other problem gamblers. The feeling that they are not alone and also having the opportunity to secretly observe through lurking, a supportive online relationship, may help them to conclude that they too might benefit from actively participating. Similar to the findings of Parks and Floyd (1996), notes are often posted anonymously at first, but eventually, it appears that the first name and correct E-mail address is provided by many GAweb participants. That is an anecdotal observation, but it is an idea that would be worth testing empirically, because it does provide an important link in the argument that is being made here. With increased participation through the continued reading of others’ posts and carrying on dialogue, a sense of hope and belongingness may arise. In turn, these feelings may help participants to explore additional sources of assistance, both online and face-to-face.

Pathways Disclosure Model

These observations have led to the development of the Pathways Disclosure Model in Figure 2. In this model, the precontemplative and contemplative stages are conceptually
Figure 2.
Pathways Disclosure Model

<table>
<thead>
<tr>
<th>No Disclosure</th>
<th>Private Reading of Info</th>
<th>CMC Lurking</th>
<th>CMC Passive Particip.</th>
<th>CMC Active Particip.</th>
<th>CMC Leadership</th>
<th>Face-to-Face Passive</th>
<th>Face-to-Face Active</th>
<th>Anonymous Face-to-Face Public Leadership</th>
<th>Full Face-to-Face Public Leadership</th>
</tr>
</thead>
</table>

Disclosure Pathways
broadened. Innovative pathways are thus incorporated into the decisional balance about whether or not to take action regarding problems.

Thanks to the possibilities of CMC, processes of seeking out a helping relationship (social support), raising personal awareness and engaging in some form of self-help can be done in a way that the precontemplator controls all aspects of and pathways to, self-disclosure. Therefore, the effects of personally-experienced stigmas are reduced thus facilitating a person’s transition from precontemplation into contemplation.

In the Pathways Disclosure Model, the amount of personal information that is disclosed increases from left to right. On the extreme left side there is no disclosure whatsoever; on the right side, disclosure is full and liberating. There is a complexity to this argument in that disclosure can be quite subjective and there may be issues of quality and quantity of the information revealed. For example, some might feel that they would have disclosed more about themselves if they were to physically join a face-to-face support group in their neighbourhood (even if they did not verbally contribute to the discourse), as opposed to freely volunteering personal demographic information (like names) via an Internet-based discussion group. For this reason, it is impossible to state definitively the model’s stages or pathways; that is, the specific benchmarks and their ordering may vary from person to person. While some pathways are described below, movement through the model is not necessarily linear. In other words, a participant may disclose information concurrently using several of these methods. There might also be additional disclosure activities in between these main items. For example, participants might choose to communicate with others via postal service, facsimile or the telephone, to name a few. Of importance, is the relative amount of anonymity participants choose to retain as they interact with others.
Moving from left to right in this Pathways Disclosure Model, the first step in disclosing personal information often begins with the private consideration of materials which can be described as 'educational' (print or electronic). This is similar to the next step, CMC lurking at asynchronous or synchronous support groups. These steps are similar, but lurking is usually connected to the present whereas educational materials may have been written in the past. Next is CMC passive participation (notes posted but without correct identification provided). This step involves more active participation and disclosure in that there is a contribution to the discourse at this stage, even though anonymity and safety is retained. Arguably, passive participation is the beginning of therapeutic activities. CMC active participation (notes posted with correct identification provided) is the next logical benchmark. Here, individuals give up some anonymity (perhaps their first name and E-mail address), but they can still easily retreat from the discourse should they feel too vulnerable.

A plausible next step is a CMC leadership role - that is, where others seek the person's input - it is a natural progression from posting notes with one's name included. Others might not always agree with the content of the posting; indeed, there have been some very strong disagreements at GAweb, but there is a sense of credibility when a participant's name appears in the discourse. This might be characterized as a 'coming out', and should accord the participant the associated status in the group. This status is even more pronounced for those who also include their correct E-mail address and post regularly.

Further movement towards the right brings into focus person-to-person contacts. Initially, I have called it face-to-face (F2F) passive (attend meetings in person as an active listener but with no disclosure); to some extent, this type of involvement can also take place through other means such as the telephone or audio or video teleconferences. More disclosure is provided when others
can actually see the individual (nonverbal communication, gender, race). Face-to-face active disclosure follows and can occur in increasing degrees. This step might best be illustrated by a participant’s verbal interaction at a face-to-face GA meeting. Next comes a face-to-face leadership role where one speaks ‘anonymously’ in public; for example, “Gerry C.” might address a large academic conference as a person in recovery from a gambling addiction. The final step involves full face-to-face public disclosure including media exchanges, political statements and so forth. At this point, participants become activists who reveal the plight of problem gamblers and the extent to which they suffer. They also call for policy changes to help those suffering this affliction and to reduce the incentives for others to become entrapped in similar circumstances. For example, Gerry C. could now be transformed using full first and last names to “Gerry Cooper” and might gladly give media interviews in his attempts to gain understanding and support for problem gamblers.

At one end of the Pathways Disclosure Model and aligned with the earliest aspect of precontemplativeness, there is absolutely no disclosure by the problem gambler. At the other end, closest to where contemplation meets the action stage and perhaps even into the maintenance stage, disclosure is full and liberating. Degrees of personal disclosure with corresponding increasing risk of personal embarrassment are found in between these extremes. The process of disclosure remains as Dindia (1998) has previously identified, a dynamic process that can be non-linear, cyclical and concurrent in different circumstances.

**Combining the Two Models**

Since personal disclosure is not necessarily a linear process, the Pathways Disclosure Model does not have to be restricted to the Transtheoretical Stages of precontemplation and
contemplation (Prochaska and DiClemente, 1982). Figure 3 illustrates how the two models can interact. That is, the same individual can be at different stages of the change process at the same time. In addition, they might choose to employ different strategies of personal disclosure.

For example, consider the individual who has been actively participating in the discourse having revealed her name, city of origin and E-mail address in tandem with specifics about her gambling problem (position “xi” in Figure 3). Another person seeks advice and support through his anonymous post discussing how he is engaged in an illegal behaviour (like prostitution or illicit drug sales) to support gambling. The woman who is already identified might want to give a note of support to the anonymous poster including a description of how she too continues to engage in such behaviour even though her gambling has discontinued. In this way, she would be taking action on a new problem which, until now, was at the precontemplative stage (position “xii”). Since this second problem has yet to be revealed to the group by the identified woman, she might opt to render her support using an alias in this case. In short, she would be simultaneously and differentially involving others as she attempts to deal with two different problems. This might not be as possible in face-to-face settings.

GAweb participants may discover that there is a subset within the online problem gambling group who have similar concerns; after a period of discussion, they may feel less isolated. This is consistent with the point made earlier by Ferguson and Madara (1998) that on the Internet it is easier to find help for rare conditions and circumstances.

I suggest that the inherent safety of online support groups (and as discussed in this Pathways Disclosure Model) is a primary reason why problem gamblers are sustained in this type of interaction. Other advantages like availability help to ensure the attraction of this approach; noting the rapid developments towards wireless access to the Internet, availability is likely to
Figure 3.
Stages of Change - Pathways Disclosure Model Interface

Stages of Change

Maintenance
Action
Contemplation
Pre-Contemplation
Relapse

Disclosure Pathways

No Disclosure  Private Reaching of Info  CMC' Linking  CMC' Passive  CMC' Active  CMC' Leadership  Face-to-Face  Face-to-Face  Face-to-Face  Face-to-Face  Anonymous  Face-to-Face  Public Leadership  Public Leadership
improve even further.

**Engaging Special-Needs Populations**

Safety at sites like GAweb may be particularly important to groups who might not have felt well-served by mainstream programs. Women’s participation at GAweb is a good case in point. Much has been written about women’s poor access to or discomfort in mainstream self-help groups and treatment programs (Granfield and Cloud, 1996; Mark and Lesieur, 1992). To some extent, this study supports these findings in that women tended to avoid GA more so than men because they found it inconvenient. While it is true that overall participation rates at GA were not significantly different between men and women (88.5 versus 70.8 percent), the differences did approach statistical significance when the effects of treatment were controlled for. Unless such issues are addressed, some women may avoid (or unnecessarily delay) getting help in the future.

In seeking help from online interventions, power is more equitably shared between those seeking assistance and those rendering it. Help-seekers not only have the benefits of easy access and safety; they also are able to take time to ponder issues and to reflect on how they want to express themselves before actually posting their thoughts.

Internet-based support groups provide individuals who experience stigma with a new means of ‘testing the waters’. Prior to CMC, information disclosure was limited primarily to content (the nature of the comments themselves). With online assistance, the vistas of both content and process are greatly enhanced. For example, graphics, video clips and audio recordings can augment the message. More importantly, the stigmatized individual contemplating disclosure can participate by ‘listening in’ on other participants without being detected. This is
analogous to invisible persons attending a GA meeting to decide if they feel safe and comfortable with the other members, and particularly if they want to join. In cyberspace, this becomes possible.

At online support groups, if participants decide to make a contribution and are not happy with the reaction they receive, they can disappear much more easily than at a face-to-face GA meeting. Should individuals want to disappear, they can easily do so by merely not adding anything more to the asynchronous discussion. In this way, they would retain the advantage of listening in on others’ reactions which could be an important learning opportunity that otherwise would not be available to them.

These factors may account for women’s apparent high degree of participation at GAweb (and at other Internet sites for addictions: for example, King’s [1994] study which included 44.2 percent women). Naturally, there may be other reasons that contribute to such high levels of female participation; but the evidence suggests that women are taking advantage of this innovative form of assistance.

The attractiveness of GAweb to women is an area for more research. Other possible explanations might be related to the fact that women in this study were much more likely to be single (both currently and in the past) than men. While online data can be falsified and, therefore, cannot definitively state if these participants had life partners, it is possible that part of the appeal of online support groups like GAweb is because people may lack a caring supportive relationship. This might help explain why participants who were newer to GA and those who did not have extensive GA affiliations, tended to be more likely to disclose personal information at GAweb than more tenured and affiliated GA types.

Another explanation might be because of the nature of the devastating financial problems
often created by excessive gambling. That is, the participant's relationship with her partner could be jeopardized if she were to truthfully reveal the extent of the financial damage caused by her gambling. Questions regarding the existence and strength of relationships and the indication that women in this study tended to avoid going to GA because they found it inconvenient may be important reasons to promote sites like GAweb to women.

GAweb might also be more appealing than face-to-face GA because it is more flexible and accommodating of other perspectives about recovery processes. According to Granfield and Cloud (1996), face-to-face self-help groups try to: "Socialize recruits away from their previously held world views" (page 52). In studying stable middle-class individuals who had rejected treatment and self-help to recover on their own, they found that many were not prepared to admit their powerlessness over their addiction and accept the labels which went along with life-long recoveries. Apparently, this view, which is promoted in GA, may be inconsistent with how many view themselves as being in the 'driver's seat'. Most of the respondents in the Granfield and Cloud (1996) study "relied upon communities of friends, family and other associates in their lives" (Ibid. page 54) and "overwhelmingly, severed all ties with [drug] using friends" (Ibid. page 55).

Interestingly, Marotta (2000) also found that many naturally recovered problem gamblers avoided treatment because they "did not identify with the 'compulsive gambler' image they were taught through the media" (page 3). Similar findings have also been reported by Derevensky and Gupta (2000) concerning young people's avoidance of treatment.

In this regard, GAweb might be perceived as a more tolerant alternative to face-to-face self-help groups. GAweb may satisfy not only those who want to supplement their GA experience but also act as a helpful catalyst for those who reject the GA lifelong recovery philosophy (but who still recognize the need for new ideas and for social support). As online
support groups become more popular, this too will become an interesting area for further research. In the current study, the data suggest that many people used GAweb as a supplement to their face-to-face GA meetings. This adjunctive-therapeutic use of online support groups has also been reported elsewhere (Das and Rae, 1999; King, 1994). It is possible that as online support groups become better known, increasing numbers of people will turn to them as their primary form of therapy.

Another interesting aspect of online assistance concerns interpersonal relationships that are forged as a result of posting notes. It appears that GAweb leads to new friendships just as Parks and Floyd (1996) discovered; they found that women were significantly more likely than men to have formed personal relationships online (page 86). While they were not sure of the reasons for this, it may be that women felt that they had fewer viable therapeutic alternatives than men. Forming such friendships was correlated with the length of affiliation with the online support group (King, 1994. Parks and Floyd, 1996).

The fit between online forms of assistance and other special-needs populations is also worth noting. This study did not ask participants about their ethnicity and race, so it is not possible to know the extent to which non-whites were involved. However, it could be that other non-dominant groups might be attracted to online support groups for the same reasons as women, namely, for safety and convenience. Printed words may not contain hints of speech accents, skin colour, age, sexual preference or appearance. Such attributes will remain non-issues unless an online participant decides to share them with others. In this way, the interchange allows for greater participant choice than in most face-to-face settings.

With 13.28 million Canadians reported to be connecting to the Internet (ComQUEST Research, 2000), and the highest group (59 percent) being between the ages of 12 and 17
(ACNielsen, 1998), it is important to consider the applicability of online forms of assistance to younger problem gamblers. This group might be more interested in exploring the merits of online assistance because of their familiarity with and affinity towards computers and the Internet. Given that anonymity is one of the advantages of this form of assistance, youthful problem gamblers might appreciate being able to connect with other adolescents and young adults without having to divulge their identity. In this way, youthful problem gamblers can minimize the effects of stigma, while also taking steps to create a community of shared interests and values. Again, this is an idea that should be tested empirically.

Online assistance might not be for all problem gamblers. Some might find it an unproductive experience and may dislike the harsh or derogatory language which is often associated with public disagreements, or ‘flames’ as they are called. They may be reluctant to post their correct E-mail address because it can lead to unwanted notes. It is necessary to possess some degree of literacy to participate in this kind of forum and access to the Internet is also needed. The correspondence from the homeless individual discussed earlier is probably atypical: however, it does challenge our assumptions about who the homeless are and how they might benefit from websites like GAweb if Internet access were more publicly available.

Some countries are attempting to make public access to the Internet more freely available. In Canada for instance, a program known as “Connecting Canadians - Community Access” is hoping to establish access sites in 5,000 rural and remote communities and up to 5,000 urban communities through libraries by March 31, 2001 (Government of Canada, 2000). Nevertheless, the evidence from this study indicates that the beneficiaries of GAweb were primarily of middle and upper socio-economic status. Making such opportunities available to economically-disadvantaged individuals is a formidable challenge.
**Future Research**

Some areas for future research have already been mentioned. Among those the most important seems to be to set up an empirical test for the Pathways Disclosure Model. This model outlines a series of avenues that problem gamblers can utilize as part of the self-disclosure recovery process. Conducting an empirical test of this model would be an important follow-up to this study. Related to this, it would be helpful to understand the internal mechanisms that lead people to proceed along the path of increased recovery. As discussed above, do feelings like hope and belongingness in an online support group increase the likelihood that participants will explore additional forms of assistance, both online and face-to-face. As suggested above, it would be worthwhile to test this model with a sample of youthful problem gamblers, particularly since this group has been difficult to involve in treatment programs (Derevensky and Gupta, 2000). It would also be important to understand why young people did not participate in this study (only two [4.3 percent] stated their age as being 25 or younger).

Some other questions that seem worthwhile researching are: are there specific reasons why certain segments of the problem gambling population (women and upper-middle class groups for example) are attracted to GAweb? Would other specific groups (for example, persons of colour and seniors) derive similar benefits from online support groups? Are there variations in how subgroups at GAweb (rural versus urban for instance) use online supports (as a supplement to other forms of recovery or as a primary therapeutic mechanism)?

Although the study does not provide evidence that exposure to GAweb reduces problem gambling, it does indicate that the participants felt they were benefitting from the exposure to GAweb. Moreover, there is some evidence to suggest that a person’s use of positive emotion words in their written articulations of difficult or problematic experiences lead to improved health
changes (Pennebaker and Francis, 1996). Nevertheless, this study does not provide evidence of the effectiveness of GAweb as a mode of recovery. However, it is an important issue to study if the formidable methodological problems associated with such an endeavour could be overcome. It would be useful to discover whether problem gamblers who use online support groups like GAweb reduce their gambling (number of occurrences, amount of money wagered and so forth) or attain a gamble-free lifestyle.

An important area for future research concerns the issue of comparability of these results from an online self-help group cohort with those receiving online specialist-delivered treatments. While there is evidence that clinicians are increasingly offering their professional services via the Internet (Powell, 1998), "research related to the effectiveness of and methods used in online counselling is sparse" (Laszlo, Esterman and Zabko, 1999). It is logical to believe that the same reasons which are valued by participants in this study regarding GAweb (access, convenience, safety, confidentiality and so forth), would also be applicable to online professional treatments.

Another area in need of exploration concerns the avoidance due to stigma of seeking assistance from face-to-face self-help groups and treatment services. Research suggests that stigma is a reason that problem gamblers avoid face-to-face forms of recovery. This study suggests that one of the attractions of GAweb may be that it reduces stigma. Does perceived stigma play a role in determining who becomes most active in GA? Does extensive participation in support groups like face-to-face GA help to reduce concerns about stigma and do concerns about stigma reduce the likelihood of participating in GA? It would be worthwhile attempting to answer these questions with other samples of online gambling support groups, including special-needs populations. In particular, it would be worthwhile knowing whether people with other forms of mental and addictive problems feel more comfortable in an online support group than
face-to-face arrangements.

Would online support groups for other personal problems experience comparable levels of participant satisfaction to that found at GAweb? Gamblers it seems are a special breed, and it may be that the anonymity of online arrangements is more important to them than to those with other problems. This would be worth investigating.

The predominant discussion in the literature regarding lurkers was inconsistent with how respondents from this sample reported their participation. That is, distinct groups of lurkers and posters were not to be found here. Only one of 50 participants in this study reported never posting. While there may have been issues of selection bias mitigating against more 'absolute' lurkers from participating in this study, it also appears that more research is needed in developing a typology of lurkers. Specifically, it seems important to know whether meaningful distinctions can be made between lurkers and people who post. Are some people more apt to lurk in certain situations and to post in others? Is there a general pattern that somebody new to an online support group follows? Do they lurk for a period of time and 'graduate' into posting notes?

It would also be interesting to determine whether practitioners in the treatment of gambling problems would refer their clients to online sites for augmentative assistance, as is customarily the practice with regard to face-to-face 12-step programs, and if not, why? In addition to GAweb, there are many other appropriate, credible and quite diverse Internet-based forms of information: many have affiliations with government agencies and academic institutions: Canadian Health Network <http://www.canadian-health-network.ca/customtools/homee.html> and TeenNet <http://www.cyberisle.org/teennet/> are two good examples. Do practitioners in this field encourage the use of these and other services?

Even though this study is based on a relatively positive view towards online support
groups, it may be prudent to consider that some might experience social problems as a result of excessive use of the Internet (Finn, 1996; Kraut et al., 1998; Morahan-Martin, 1998; Zimmerman, 1987). Some researchers, however, disagree with this view; for example, Shaffer, Hall and Vander Bilt (2000) state: "Whether excessive Internet or computer use causes or reflects psychopathology has not been established. Similarly, it is not clear whether this behavior represents an uncontrolled habit or an uncontrollable impulse" (page 163). Nevertheless, it is important not to turn a blind eye to the potential problems created by the Internet, including online support groups.

As indicated above, there is need for more evidence about the effectiveness of online support groups in assisting problem gamblers. Nevertheless, one approach to investigating this issue would be for those charged with the responsibility for providing adequate health care to establish new online support groups for specialized constituencies. There is no reason why several GAweb-type support groups - each tailored to a specific group (women, seniors, youth, Aboriginals, language appropriate...), and specific problems (for example, depression, anxiety, alcohol abuse) - could not co-exist under one central health-oriented ‘web-umbrella’. These experimental sites could also be used as the basis for conducting a feasibility study for further expanding this approach. Promoting such a site could take some very innovative approaches as a result of social marketing exercises.

Limitations

There are a number of limitations to this study which deserve comment. First, there is no way to know how, or on what basis, individuals in this study decided to participate. Future studies need to be aware of this issue of selectivity, particularly if they hope to make inferences to
other populations and applications. However, this was an exploratory study, and the limitations of the sample should be acknowledged. Many have called attention to this issue of sample bias and questions associated with the generalizability of such studies. On the other hand, Coomber, who studied drug pushers through an online survey method, contends that "sample bias may be of less concern to a researcher when they are interested in particular (especially 'deviant' or hidden) types of behaviours" (1997, paragraph 5.8). It may be that the privacy afforded by E-mail sampling will increase our ability to 'hear' from problem gamblers who feel stigmatized.

Second, the sample in this study is biased towards a high socio-economic status group who primarily lived in North America and for the most part, communicated in English. Everybody who participated had some degree of literacy and access to and knowledge about computers and the Internet. In addition, the number of people who participated in the study was relatively small so further caution should be taken in generalizing these results to other groups of problem gamblers. It is not known for example, if similar results would be found amongst a lower socio-economic status group of respondents. Even though the percentage of women who participated was higher than most similar studies, the reason for this remains a mystery. For instance, it is not clear if this was because women problem gamblers generally feel safer participating in online surveys and, therefore, were more likely to participate in this kind of study, or because women problem gamblers tended to be present at GAweb in equal numbers to the males.

Third, some might argue that this study is based on self-report data without the benefit of validation from collateral sources. This is an important criticism that must be taken very seriously. Not only am I unable to substantiate claims made by participants about their successful recoveries, I cannot even state with authority that everybody was who they claimed to be. By
comparison, in most instances of face-to-face or even telephone surveys, age and gender can be recorded with some degree of assurance. This issue confronts all studies of online initiatives. For example, two of the problem gambling studies cited earlier, utilized self report data and collateral verification; in each case, however, there was good reliability with the participants’ self-reports (Hodgins and el-Guebaly, 2000; Marotta, 2000).

Fourth, the issue of false positive scores on the SOGS should also be considered. On the advice of one of the creators of the screening device (H. R. Lesieur, personal communication, August 9, 1999), I attempted to control for this by raising the criterion for inclusion in this study to a score of 5 (indicative of “pathological gambling”). However, it is still possible that some were incorrectly identified as having gambling problems when in fact they did not. Of the three who had SOGS scores of less than 10, one had experienced problems with betting money or gambling in the past, but not at the time of their completing the survey; the other two stated they had problems most of the time. There were two others who stated that they had never had a problem with gambling (no to question 16), but their scores on the SOGS suggested otherwise in that both scored 14. I might have been more concerned about their inclusion into this study had their SOGS scores been 6 or 7. Related to the issue of SOGS scores is the time frame used in responding to the questions. In this study, individuals responded to the SOGS items based on lifetime experiences; others have asked the same questions using the past 12 months as the unit of analysis. It is difficult to know if this sample’s SOGS scores would have been much different had participants provided such data.

Fifth, it is also interesting to ask whether these findings could be replicated in one or two years. This study is a snapshot of how individuals were functioning within a fairly narrow time frame. A more accurate picture might emerge from longitudinal research that investigates
ongoing involvement with GAweb.

Sixth, it might be argued that stigma is not so negative in and of itself. Some might suggest that if gambling were entirely free of stigma, there would be an even greater availability of gambling in communities and, hence, a greater number of problem gamblers. In other words, there may be a protective feature to stigma. This is a valid argument and calls attention to the need to be more specific regarding the exact nature of stigma. In this study, I was primarily concerned with the kind of stigma that kept problem gamblers from obtaining needed help. In the future, other researchers would be well advised to address this 'double-edge' to stigma.

Seventh, the qualitative analysis was only performed by myself and therefore, the absence of other coders, may have weakened the validity of these results. While I reviewed the data many times searching for themes, it is possible that inherit personal biases and meanings I attributed to words may have interfered with my ability to uncover all of the existing themes.

Finally, the use of computer-mediated-communication to obtain information, social support and professional help remains a very new endeavour for most. Some have already reported important warnings about issues like Internet addiction, which suggest that the use of this approach is not without its drawbacks. As many more become active on the Internet, there will be important and ongoing roles for research and education, to minimize the risks of this new form of communication, while maximizing its potential.

**Summary Remarks**

Over 20 years ago, in his article entitled "The dangers of self-help groups", Stuart Henry concluded: "What is required is a serious look at alternative ways to cope with the needs and requirements of those who are getting no satisfaction from self-help or professional care" (1978).
One wonders if Mr. Henry would concede in 2000, with help being available via computer-mediated communication and the Internet, that we have attained that alternative.

Help for gambling problems can be found via the Internet and many who address their problems in this fashion feel that they derive considerable benefit; both as a primary source of therapy and as an adjunct to other methods of recovery. most notably, Gamblers Anonymous. Computer-mediated-communication will not be a solution for everybody. However, the challenge for academe, clinicians, policy makers and consumer advocates will be to discover who, and under what circumstances, are best suited for deriving benefit from online assistance, and to follow-up the new knowledge with appropriate action.

It is hoped that the Pathways Disclosure Model contributes to this drive for new knowledge by providing a basis for understanding why online assistance may be of special interest to many problem gamblers, particularly those concerned about the effects of stigma.
REFERENCES


Comley, P. (1996). *The Use of the Internet as a Data Collection Method* [49 paragraphs] [Available online at: <http://www.sga.co.uk/esomar.html>].


Research Online. 2(2). [Available online at: <http://www.socresonline.org.uk/socresonline/2/2/2.html>].


Ogborne, A. C., and DeWitt, D. J. (1999). Lifetime use of professional and community services for help with drinking: Results from a Canadian population survey. Journal of Studies on Alcohol, 60 (6), pp. 867-872.


Dear GAweb Visitor:

Through this note I invite you to participate in a study of Internet-based help and support which is specific to problem gambling. Help for various health and personal problems via the Internet is a relatively new and quickly growing activity. However, very little is known about how the Internet can assist problem gamblers. As part of my Doctor of Education studies at the Ontario Institute for Studies in Education of the University of Toronto, I hope to learn more about how problem gamblers use the Internet as a way of finding help for these problems. I anticipate that the study's findings will lead to improved services for problem gamblers and their families. The study I am asking you to participate in has been passed through a rigorous ethical review procedure at the University of Toronto (July, 1999).

In this study, it is important for me to hear from as many problem gambler visitors to GAweb as possible, including individuals who post notes as well as those who have only been reading the posts of others. It will take you about 20 minutes to complete an E-mail survey. You can withdraw from the study any time; strict measures will be followed to protect your confidentiality. Your responses will be grouped along with other study participants so that no personally identifying information will ever be reported.

If you are interested in participating in this study, you can find out more detailed information at <http://icewall.vianet.on.ca/pages/gcooper/study1.htm> or you can contact me directly at either <gcooper@vianet.on.ca> or via postal service at: Mr. Gerry Cooper. Suite 302. 888 Regent St., Sudbury, Ontario, Canada, P3E 6C6. Many thanks for considering this invitation.

Best Regards,

Gerry Cooper.
APPENDIX B

Detailed Explanation of Study at 'Gambling Study Info Site'

Dear Potential Study Participant:

My name is Gerry Cooper. I am conducting a study which examines problem gamblers’ use of the Internet as a means of finding help for these problems. The study is part of the requirements for my Doctor of Education degree at the Ontario Institute for Studies in Education of the University of Toronto. This research project has been subjected to a rigorous ethical review (July, 1999), as is typically the case. Professor Jack Quarter and a distinguished committee of faculty from the University of Toronto are supervising my work.

Since opportunities to gamble are rapidly increasing worldwide, it is safe to expect that as gambling availability goes up, so too will the numbers of people with gambling-related problems. It is important that we learn how to provide the best kinds of help for these problems and to ensure an efficient and timely way of responding when someone says they need help.

Since GAweb is perhaps the most successful Internet-based support group for problem gamblers, I am inviting problem gamblers who have visited there to participate in this study. It is important that I hear from as many such visitors to GAweb as possible. That includes those who have restricted their participation to only reading other’s notes as well as from those who have posted notes. Since this study is focussed on the needs of problem gamblers, I do not need to hear from significant others (family members, friends and so forth), just those individuals who consider themselves to have (or had in the past) gambling problems.

After reading this brief overview, if you are a problem gambler who agrees to participate in this study, I would kindly ask that you confirm that in a brief E-mail message to me. I would then E-mail you a survey which should take about 20 minutes to complete. Once you have completed the survey, you simply E-mail it back to me. That is all there is to it. Should you be
interested in the study's findings, the survey will tell you how to receive a summary report.

Participants of this study should know that strict measures will be taken to ensure that all information provided will remain confidential. Your anonymity will be assured and you can withdraw from the study at any time. Your responses will be grouped along with other study participants so that no personally identifying information will ever be reported.

It is possible that information you provide through this survey will help to improve services for individuals with gambling problems. However, it is impossible to guarantee that your participation will necessarily result in direct benefits to you.

Many thanks for considering this request. I hope to hear from you soon. If you consent to participating in this study, please contact me at <gecooper@vianet.on.ca>.

Sincerely yours,

Gerry Cooper
Note to Those With Identified E-mail Addresses

Dear GAweb Participant:

In reading the GAweb postings for [specific month cited], 1999, I came across your note and E-mail address. Given your interest in problem gambling, I thought that you might appreciate an invitation to participate in a study of Internet-based help and support, which is specific to problem gambling. If you are not interested, simply delete this message now and you will not be contacted again by me.

This is an important area to study because help for various health and personal problems via the Internet is a relatively new and quickly growing activity; unfortunately, very little is known about this topic from a scientific point of view. As part of my Doctor of Education studies at the Ontario Institute for Studies in Education of the University of Toronto, I hope to learn more about how problem gamblers use the Internet as a way of finding help for these problems. I anticipate that the study's findings will lead to improved services for problem gamblers and their families. The study I am asking you to participate in has been passed through a rigorous ethical review procedure at the University of Toronto (July, 1999).

In this study, it is important for me to hear from as many problem gambler visitors to GAweb as possible. Should you be interested, it would take you about 20 minutes to complete a survey via E-mail. You can withdraw from the study at any time and strict measures will be followed to protect your confidentiality. Your responses will be grouped along with other study participants so that no personally identifying information will ever be reported. I will not contact you again about this matter unless I hear from you.

If you are interested in participating in this study, you can find out more detailed information at <http://icewall.vianet.on.ca/pages/gcooper/study1.htm> or you can contact me...
directly at either <gecooper@vianet.on.ca> or via postal service at: Mr. Gerry Cooper. Suite 302, 888 Regent St., Sudbury, Ontario, Canada, P3E 6C6. Many thanks for considering this invitation.

Best Regards.

Gerry Cooper.
APPENDIX D
Gambling Study Has Concluded Note

Dear GAweb Visitor:

Perhaps you read a posting over the summer of 1999 at GAweb (now preserved in the archives) or received an E-mail note calling attention to my study of Internet-based help and support, which is specific to problem gambling. In this study, I hope to learn more about how problem gamblers use the Internet as a way of finding help for these problems. It is hoped that the study’s findings will lead to improved services for problem gamblers and their families.

Through this note, I simply want to communicate that since I am now ready to begin the data analysis phase of the study, I will not be able to include any surveys which are returned after Saturday, January 8, 2000. If you are currently planning to return the survey to me, please ensure that it gets to me by January 8, 2000, in order to be included in the study. To ensure confidentiality, surveys returned to me after that date will be immediately destroyed.

For those who contributed to the study, please accept my warmest thanks. I want to assure you that I will make every effort to bring forward the results of this study so that improvements in problem gambling treatment can be made. If you are interested in learning more about the study’s findings once the data has been analyzed (expected to be Spring, 2000), please send me a note at <gcooper@vianet.on.ca>.

Regards,

Gerry Cooper
APPENDIX E

Survey Instrument for Problem Gamblers

Thank you for agreeing to participate in this study. Please only complete this survey once. The survey will help me to learn about problem gamblers' use of Internet-based support groups as a means of finding help with their problems. It should take you about 20 minutes to complete. Instructions at the end tell you how to return it.

Please be as honest as possible and try to answer all questions. Your anonymity is guaranteed. The first few questions in Section 1 will address some general information about you (your gender, age, name of country you reside in...); in Section 2 you will be asked about your gambling; Section 3 looks at your use of face-to-face forms of assistance (like GA and professional counselling) for gambling problems; and finally, Section 4 has a few questions about your experiences with Internet-based forms of help (like GAweb). This survey is only intended to be completed by individuals who consider themselves to have (or had in the past) gambling problems.

Many thanks for your participation.

...Section 1 follows on next page
Section 1: Some Basic Information About You

Questions 2 and 7 ask for a number, otherwise, please check only one box for each question in this section.

1. Your marital status is:
   [ ] 01 Never Married
   [ ] 02 Married/Common law
   [ ] 03 Separated/Divorced/Widowed

2. Please state your current age: ____

3. The highest level of schooling you have completed is:
   [ ] 01 Elementary school diploma or less
   [ ] 02 Some secondary school but no diploma
   [ ] 03 Secondary school diploma
   [ ] 04 Some post-secondary school but no diploma/degree
   [ ] 05 Post-secondary diploma (College)
   [ ] 06 Post-secondary degree (University)
   [ ] 07 Graduate Degree
   [ ] 08 Other

4. Your employment status is best described as:
   [ ] 01 Full-time student
   [ ] 02 Homemaker
   [ ] 03 Employed part-time
   [ ] 04 Employed full-time
   [ ] 05 Not in the labour force due to unemployment
   [ ] 06 Not in the labour force due to medical reasons
   [ ] 07 Retired
   [ ] 08 Other

... continued on next page
5. Your occupation is best described as:
   [  ] 01 Homemaker
   [  ] 02 Corporate Executive/Employer
   [  ] 03 Self-employed
   [  ] 04 Manager/Supervisor
   [  ] 05 Professional
   [  ] 06 Clerical
   [  ] 07 Service Worker
   [  ] 08 Industrial Worker
   [  ] 09 Not applicable because I am a student
   [  ] 10 Not applicable because of other reasons
   [  ] 11 Other

6. You are:
   [  ] 01 Male
   [  ] 02 Female

7. The total number of people (including you) who live in your household is:
   [____ person(s)]
   [  ] 98 Not applicable (ie. because I live in an institution)

8. How would you describe your standard of living:
   [  ] 01 Very much below average
   [  ] 02 Slightly below average
   [  ] 03 About average
   [  ] 04 Slightly above average
   [  ] 05 Very much above average
   [  ] 98 Not applicable (ie. because I live in an institution)

9. Please identify the part of the world you reside in:
   [  ] 01 Asia
   [  ] 02 Australia
   [  ] 03 Canada
   [  ] 04 Europe
   [  ] 05 U.S.A.
   [  ] 06 Other

... continued on next page
10. Please indicate the item which best describes the community where you live:

- [ ] 01 Agricultural rural (ie. farming)
- [ ] 02 Isolated non-agricultural rural (ie. remote logging settlement)
- [ ] 03 Large urban/suburban area (ie. city of 40,000 or more residents)
- [ ] 04 Small town/village (ie. under 40,000 residents)

******************************************************************************

Section 2: Some Questions About Your Gambling

11. Please indicate which of the following types of gambling you have done in your lifetime. For each type, mark one answer: "not at all," "less than once a week," or "once a week or more".

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not at all</th>
<th>Less than once a week</th>
<th>Once a week or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Played cards for money</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Bet on horses, dogs, or other animals (in off-track betting, at the track, or with a bookie)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Bet on sports (parlay cards, with a bookie, or at jai alai)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Played dice games (including craps, over and under, or other dice games) for money</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Went to casino (legal or otherwise)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Played the numbers or bet on lotteries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Played bingo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Played the stock and/or commodities market</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Played slot machines, poker machines, or other gambling machines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Bowled, shot pool, played golf, or played some other game of skill for money</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

... continued on next page
12. What is the largest amount of money you have ever gambled with on any one day?
[ ] 01 Never have gambled
[ ] 02 $1 or less
[ ] 03 More than $1 up to $10
[ ] 04 More than $10 up to $100
[ ] 05 More than $100, up to $1000
[ ] 06 More than $1000 up to $10,000
[ ] 07 More than $10,000

13. Do (did) your parents have a gambling problem?
[ ] 01 Both my father and mother gamble (or gambled) too much
[ ] 02 My father gambles (or gambled) too much
[ ] 03 My mother gambles (or gambled) too much
[ ] 04 Neither one gambles (or gambled) too much

14. When you gamble, how often do you go back another day to win back money you lost?
[ ] 01 Never
[ ] 02 Some of the time (less than half the time I lost)
[ ] 03 Most of the time I lost
[ ] 04 Every time I lost

15. Have you ever claimed to be winning money gambling but weren't really? In fact, you lost?
[ ] 01 Never (or never gamble)
[ ] 02 Yes, less than half the time I lost
[ ] 03 Yes most of the time

16. Do you feel you have a problem with gambling?
[ ] 01 No
[ ] 02 Yes, in the past but not now
[ ] 03 Yes most of the time

... continued on next page
17. Do you ever gamble more than you intend to? [ ] 01 [ ] 02
18. Have people criticized your gambling? [ ] 01 [ ] 02
19. Have you ever felt guilty about the way you gamble or what happens when you gamble? [ ] 01 [ ] 02
20. Have you ever felt like you would like to stop gambling but didn't think you could? [ ] 01 [ ] 02
21. Have you ever hidden betting slips, lottery tickets, gambling money, or other signs of gambling from your spouse/partner, children or other important people in your life? [ ] 01 [ ] 02
22. Have you ever argued with people you live with over how you handle money? [ ] 01 [ ] 02
23. (If you answer "yes" to question 22): Have money arguments ever centred on your gambling? [ ] 01 [ ] 02
24. Have you ever borrowed from someone and not paid them back as a result of your gambling? [ ] 01 [ ] 02
25. Have you ever lost time from work (or school) due to gambling? [ ] 01 [ ] 02

... continued on next page
26. If you borrowed money to gamble or to pay gambling debts, who or where did you borrow from? (check "yes" or "no" for each)

<table>
<thead>
<tr>
<th></th>
<th>no</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. from household money</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>b. from your spouse or partner</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>c. from other relatives or in-laws</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>d. from banks, loan companies, or credit unions</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>e. from credit cards</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>f. from loan sharks (Shylocks)</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>g. you cashed in stocks, bonds or other securities</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>h. you sold personal or family property</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>i. you borrowed on your chequing account (passed bad checks)</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>j. you have (had) a credit line with a bookie</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>k. you have (had) a credit line with a casino</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
</tbody>
</table>

Section 3: Questions About Your Use of Face-to-Face Forms of Assistance

27. Have you ever attended a face-to-face self-help group like GA (Gamblers Anonymous) on account of your gambling (if yes, please state approximate date)?

[ ] 01 No
[ ] 02 Yes, I first attended around: month_________ year_______

28. When was your most recent attendance?

[ ] 01 January, 19__
[ ] 02 February, 19__
[ ] 03 March, 19__
[ ] 04 April, 19__
[ ] 05 May, 19__
[ ] 06 June, 19__
[ ] 07 July, 19__
[ ] 08 August, 19__
[ ] 09 September, 19__
[ ] 10 October, 19__
[ ] 11 November, 19__
[ ] 12 December, 19__
[ ] 13 I have not attended face-to-face self-help groups like GA

... continued on next page
29. Using the scale below where 1 stands for very little participation and 7 stands for very extensive participation, please indicate how you would describe your participation with face-to-face meetings of GA (or another problem gambling self-help group)?

I participated

my participation score is:_____

30. Would you say that you ever avoided going to a face-to-face GA meeting (or another problem gambling self-help group) because (please indicate yes or no for each item):

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. You were concerned about what others might think of you if they found out</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>b. You had concerns about confidentiality</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>c. You did not want to make a commitment</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>d. You would not feel comfortable telling personal information to a group of people</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>e. It was not convenient to attend (due to scheduling, child care, transportation etc.)</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>f. Other reasons (please specify): ___________________________</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
</tbody>
</table>

31. Have you ever attended face-to-face professional counselling or a specialized treatment program on account of your gambling, and if so, when was your first visit?

[ ] 01 No

[ ] 02 Yes, I first visited around: month___________ year______
32. When was your most recent attendance?

<table>
<thead>
<tr>
<th></th>
<th>01 January, 19___</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>02 February, 19___</td>
</tr>
<tr>
<td></td>
<td>03 March, 19___</td>
</tr>
<tr>
<td></td>
<td>04 April, 19___</td>
</tr>
<tr>
<td></td>
<td>05 May, 19___</td>
</tr>
<tr>
<td></td>
<td>06 June, 19___</td>
</tr>
<tr>
<td></td>
<td>07 July, 19___</td>
</tr>
<tr>
<td></td>
<td>08 August, 19___</td>
</tr>
<tr>
<td></td>
<td>09 September, 19___</td>
</tr>
<tr>
<td></td>
<td>10 October, 19___</td>
</tr>
<tr>
<td></td>
<td>11 November, 19___</td>
</tr>
<tr>
<td></td>
<td>12 December, 19___</td>
</tr>
</tbody>
</table>

[   ] 13 I have not attended face-to-face professional counselling or a specialized treatment program.

33. Using the scale below where 1 stands for very little participation and 7 stands for very extensive participation, please indicate how you would describe your participation with face-to-face professional counselling or a specialized treatment program?

I participated

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>very little</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>very extensively</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

my participation score is:_____

34. Would you say that you ever avoided going to face-to-face professional counselling or a specialized treatment program because (please indicate yes or no for each item):

<table>
<thead>
<tr>
<th></th>
<th>01</th>
<th>02</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. You were concerned about what others might think of you if they found out</td>
<td>[   ]</td>
<td>[   ]</td>
</tr>
<tr>
<td>b. You had concerns about confidentiality</td>
<td>[   ]</td>
<td>[   ]</td>
</tr>
<tr>
<td>c. You did not want to make a commitment</td>
<td>[   ]</td>
<td>[   ]</td>
</tr>
<tr>
<td>d. You would not feel comfortable telling personal information to a group of people</td>
<td>[   ]</td>
<td>[   ]</td>
</tr>
<tr>
<td>e. It was not convenient to attend (due to scheduling, child care, transportation etc.)</td>
<td>[   ]</td>
<td>[   ]</td>
</tr>
<tr>
<td>f. Other reasons (please specify): _____________________________</td>
<td>[   ]</td>
<td>[   ]</td>
</tr>
</tbody>
</table>

... continued on next page
Section 4: Questions About Your Use of Internet-Based Forms of Assistance (Like GAweb)

35. Please indicate as best you can, the month and year of your first visit to GAweb:

[ ] 01 January, 19__
[ ] 02 February, 19__
[ ] 03 March, 19__
[ ] 04 April, 19__
[ ] 05 May, 19__
[ ] 06 June, 19__
[ ] 07 July, 19__
[ ] 08 August, 19__
[ ] 09 September, 19__
[ ] 10 October, 19__
[ ] 11 November, 19__
[ ] 12 December, 19__
[ ] 13 I cannot recall when I first visited GAweb

36. Which category best describes how often do you visit GAweb (please check only one):

[ ] 01 Very often (on most days of the week)
[ ] 02 Often (usually once or twice a week)
[ ] 03 Occasionally (usually once or twice a month)
[ ] 04 Very Seldom (once or twice each year or less)
[ ] 05 Other (please specify): ________________

37. How often would you say you have posted notes?

[ ] 01 Very Often (20 or more times)
[ ] 02 Often (between 11 and 19 times)
[ ] 03 Occasionally (between 5 and 10 times)
[ ] 04 Very Seldom (fewer than 5 times)
[ ] 05 Never

... continued on next page
38. Would you say that the opportunity to secretly read other’s postings at GAweb (this has been called “lurking” by some) has increased the likelihood that you have or will:

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. continue to participate</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>b. post notes</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>c. reveal personal information</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>d. seek additional forms of Internet help</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>e. seek additional forms of face-to-face help</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
</tbody>
</table>

39. Has your exposure to GAweb increased the likelihood that you would seek additional help as part of a program of personal recovery if needed in the future?

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. continued GAweb participation</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>b. other Internet self-help</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>c. attendance at face-to-face GA</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>d. other face-to-face self-help</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
<tr>
<td>e. face-to-face counselling/treatment</td>
<td>[ ] 01</td>
<td>[ ] 02</td>
</tr>
</tbody>
</table>

40. If you have any other comments you would like to make regarding your observations about GAweb or any other form of Internet-base assistance for problem gambling, please list them here (feel free to use as much space as you wish):

________________________________________________________________________
________________________________________________________________________
41. Would you like to receive a summary report from this study?
   [ ] 01 No, I do not want to receive a summary report from this study.
   [ ] 02 Yes, I am interested in receiving a summary report of the study's findings. My
correct E-mail address is:_________________________

Please return this survey by <DATE SPECIFIED> in one of the following formats:
   [ ] E-mail to <gcooper@vianet.on.ca>
   [ ] Fax to Mr. Gerry Cooper at (705) 675-9121
   [ ] Mail to Mr. Gerry Cooper, c/o Centre for Addiction and Mental Health, Suite 302,
       888 Regent Street, Sudbury, Ontario, Canada, P3E 6C6.

Thanks again for your participation.

This concludes the survey.
## APPENDIX F

Tables

Table 1.

<table>
<thead>
<tr>
<th>Month</th>
<th># Letters Sent</th>
<th># Requesting Survey (% letters sent)</th>
<th># Completing Survey (% letters sent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>31</td>
<td>11 (35.5)</td>
<td>6 (19.4)</td>
</tr>
<tr>
<td>June</td>
<td>16</td>
<td>8 (50.0)</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td>July</td>
<td>19</td>
<td>10 (52.6)</td>
<td>5 (26.3)</td>
</tr>
<tr>
<td>August</td>
<td>21</td>
<td>3 (14.3)</td>
<td>2 (9.5)</td>
</tr>
<tr>
<td>September</td>
<td>20</td>
<td>9 (45.0)</td>
<td>7 (35.0)</td>
</tr>
<tr>
<td>October</td>
<td>17</td>
<td>7 (41.2)</td>
<td>6 (35.3)</td>
</tr>
<tr>
<td>November</td>
<td>17</td>
<td>9 (52.9)</td>
<td>3 (16.7)</td>
</tr>
<tr>
<td>December</td>
<td>35</td>
<td>14 (40.0)</td>
<td>7 (20.0)</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>71 (40.3)</td>
<td>41 (23.3)</td>
</tr>
</tbody>
</table>
### Table 2.

#### Personal Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Males % (n)</th>
<th>Females % (n)</th>
<th>Total % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;35 years</td>
<td>15.4 (4)</td>
<td>29.2 (7)</td>
<td>22.0 (11)</td>
</tr>
<tr>
<td>35-49 years</td>
<td>42.3 (11)</td>
<td>37.5 (9)</td>
<td>40.0 (20)</td>
</tr>
<tr>
<td>50+ years</td>
<td>30.8 (8)</td>
<td>29.2 (7)</td>
<td>30.0 (15)</td>
</tr>
<tr>
<td>Missing</td>
<td>11.5 (3)</td>
<td>4.2 (1)</td>
<td>8.0 (4)</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (26)</td>
<td>100.0 (24)</td>
<td>100.0 (50)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>15.4 (4)</td>
<td>4.2 (1)</td>
<td>10.0 (5)</td>
</tr>
<tr>
<td>College Diploma/University Degree</td>
<td>26.9 (7)</td>
<td>33.3 (8)</td>
<td>30.0 (15)</td>
</tr>
<tr>
<td>Some Post-Secondary</td>
<td>34.6 (9)</td>
<td>50.0 (12)</td>
<td>42.0 (21)</td>
</tr>
<tr>
<td>High School Diploma or less</td>
<td>11.5 (3)</td>
<td>4.2 (1)</td>
<td>8.0 (4)</td>
</tr>
<tr>
<td>Missing</td>
<td>11.5 (3)</td>
<td>8.3 (2)</td>
<td>10.0 (5)</td>
</tr>
<tr>
<td>Total</td>
<td>99.9 (26)</td>
<td>100.0 (24)</td>
<td>100.0 (50)</td>
</tr>
<tr>
<td><strong>SOGS score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (5-10)</td>
<td>19.2 (5)</td>
<td>8.3 (2)</td>
<td>14.0 (7)</td>
</tr>
<tr>
<td>Medium (11-15)</td>
<td>38.5 (10)</td>
<td>70.8 (17)</td>
<td>54.0 (27)</td>
</tr>
<tr>
<td>High (16-20)</td>
<td>42.3 (11)</td>
<td>20.8 (5)</td>
<td>32.0 (16)</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (26)</td>
<td>99.9 (24)</td>
<td>100.0 (50)</td>
</tr>
</tbody>
</table>
Table 3.

<table>
<thead>
<tr>
<th>Family Demographic Characteristics of Participants</th>
<th>Males % (n)</th>
<th>Females % (n)</th>
<th>Total % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>7.7 (2)</td>
<td>25.0 (6)</td>
<td>16.0 (8)</td>
</tr>
<tr>
<td>Married/Common Law</td>
<td>88.5 (23)</td>
<td>58.3 (14)</td>
<td>74.0 (37)</td>
</tr>
<tr>
<td>Separated/Divorced/Widowed</td>
<td>---</td>
<td>16.7 (4)</td>
<td>8.0 (4)</td>
</tr>
<tr>
<td>Missing</td>
<td>3.8 (1)</td>
<td>---</td>
<td>2.0 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0 (26)</td>
<td>100.0 (24)</td>
<td>100.0 (26)</td>
</tr>
<tr>
<td><strong>Standard of Living</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Much Below Average</td>
<td>---</td>
<td>4.2 (1)</td>
<td>2.0 (1)</td>
</tr>
<tr>
<td>Slightly Below Average</td>
<td>---</td>
<td>16.7 (4)</td>
<td>8.0 (4)</td>
</tr>
<tr>
<td>Average</td>
<td>30.8 (8)</td>
<td>33.3 (8)</td>
<td>32.0 (16)</td>
</tr>
<tr>
<td>Slightly Above Average</td>
<td>46.2 (12)</td>
<td>41.7 (10)</td>
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<td>Very Much Above Average</td>
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<td>4.2 (1)</td>
<td>12.0 (6)</td>
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<td>3.8 (1)</td>
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<td>2.0 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0 (26)</td>
<td>100.1 (24)</td>
<td>100.0 (50)</td>
</tr>
<tr>
<td><strong>Number in Household</strong></td>
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<td>12.5 (3)</td>
<td>6.0 (3)</td>
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<tr>
<td>2</td>
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<td>37.5 (9)</td>
<td>32.0 (16)</td>
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<td>38.5 (10)</td>
<td>25.0 (6)</td>
<td>32.0 (16)</td>
</tr>
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<td>4</td>
<td>15.4 (4)</td>
<td>16.7 (4)</td>
<td>16.0 (8)</td>
</tr>
<tr>
<td>5</td>
<td>11.5 (3)</td>
<td>4.2 (1)</td>
<td>8.0 (4)</td>
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<td>Missing</td>
<td>3.8 (1)</td>
<td>---</td>
<td>2.0 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>99.9 (26)</td>
<td>100.1 (24)</td>
<td>100.0 (50)</td>
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</tbody>
</table>
### Employment-related Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Males % (n)</th>
<th>Females % (n)</th>
<th>Total % (n)</th>
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<tbody>
<tr>
<td><strong>Employment Status</strong></td>
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<tr>
<td>Student</td>
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<td>2.0 (1)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>---</td>
<td>8.3 (2)</td>
<td>4.0 (2)</td>
</tr>
<tr>
<td>Employed Part-time</td>
<td>3.8 (1)</td>
<td>8.3 (2)</td>
<td>6.0 (3)</td>
</tr>
<tr>
<td>Employed Full-time</td>
<td>76.9 (20)</td>
<td>70.8 (17)</td>
<td>74.0 (37)</td>
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<tr>
<td>Unemployed</td>
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<td>6.0 (3)</td>
</tr>
<tr>
<td>Retired/Other</td>
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<td>6.0 (3)</td>
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<td>Missing</td>
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<td>2.0 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>99.8 (26)</td>
<td>99.9 (24)</td>
<td>100.0 (50)</td>
</tr>
<tr>
<td><strong>Occupational Status</strong></td>
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<td>Homemaker/Other</td>
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<td>8.3 (2)</td>
<td>12.0 (6)</td>
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<tr>
<td>Executive/Self-Employed</td>
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<td>18.0 (9)</td>
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<tr>
<td>Manager/Supervisor</td>
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<td>16.7 (4)</td>
<td>16.0 (8)</td>
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<td>Professional</td>
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<td>30.0 (15)</td>
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<td>Missing</td>
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<td>4.0 (2)</td>
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<td><strong>Total</strong></td>
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<td>100.0 (50)</td>
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Table 5.

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<td>Community Type</td>
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<td>Agricultural/Rural</td>
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<td>Isolated/Non-rural</td>
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<td>Small Town/Village</td>
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<td>Larger Urban (40,000+ population)</td>
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<tr>
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<tr>
<td>Total</td>
</tr>
<tr>
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<td>Canada</td>
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<tr>
<td>USA</td>
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<td>Missing</td>
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<td>Total</td>
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