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The Relationship of Locus of Control to Pathological Gambling

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An Abstract Presented to the Faculty of the Graduate School of Lindenwood University in Partial Fulfillment of the Requirements for the Degree of Master's in Arts.

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Abstract

This study was done to measure the Locus of Control between male pathological gamblers and male non-pathological gamblers. First, the study was done to determine if male pathological gamblers have a greater belief in Powerful Others and Chance than male non-pathological gamblers. Second, the study was done to determine if male non-pathological gamblers have a greater belief in Internal Control than male pathological gamblers. Fifty participants were requested to complete the Levenson's Locus of Control scale, and a demographic questionnaire. Results indicated that a significant difference between male pathological gamblers and male non-pathological gamblers on the Internal Control, Powerful Others and Chance scales of the Locus of Control construct.

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Dedication

To Mitch,

The love of my life,

May you have the strength to develop the internal control necessary to fight and put your addiction into permanent remission. I miss you.

Chapter 1

Introduction

In general, the literature reveals there are differences between male pathological gamblers and male non-pathological gamblers in the areas of how they view powerful others, internal control and chance. It seems that pathological gamblers, according to such psychoanalysts as Bergler (1958), Greenson (1947) and Lindner (1950), tend to have an over identification with one's parent(s) or powerful others, which usually results in detriment to the pathological gambler. The pathological gambler seems to be struggling with control issues and chooses to deal with conflict by gambling instead of confronting issues (Rosenthal 1986; Olmsted, 1962).

Gamblers seem to look to external factors to control their lives rather than taking the necessary internal steps to control their own destiny. Rosenthal's research reflects that pathological gamblers believe the lack of money is the cause of all of their problems and the solution to all of their problems. Rosenthal believed that pathological

gambler's confuse financial independence with emotional independence (1986).

It appears that pathological gamblers have distorted thinking, which allows them to live in a world of denial. This denial gives the pathological gambler the illusion of having power and control over their lives (Rosenthal, 1986). Even when pathological gamblers sustain large financial losses, they continue to have an omnipotent belief that bad luck is something that will pass and good luck will once again be on their side, because they are special (Rosenthal, 1992).

Rosenthal's research shows that gambling provides numerous defense mechanisms for the addict. Illusion of power and control, achieved through gambling, is certainly a way of fighting depression, anxiety, uncertainty, helplessness and being overwhelmed by the uncontrollable. Gambling can be a desperate attempt to maintain a fragile sense of identity (Rosenthal, 1987).

Statement of Purpose

The present study was designed to determine if, by utilizing the Locus of Control construct (Levenson, 1981), male pathological gamblers would score lower on the Internal Control Scale and higher on the Powerful

Others and Chance Scales than male non-pathological gamblers.

Hypothesis

The three hypothesis of this study are:

Hypothesis 1:

There will be no significant difference between male pathological gamblers and male non-pathological gamblers on the Internal Control scale of the Locus of Control construct.

Hypothesis 2:

There will be no significant difference between male pathological gamblers and male non-pathological gamblers on the Powerful Others scale of the Locus of Control construct.

Hypothesis 3:

There will be no significant difference between male pathological gamblers and male non-pathological gamblers on the Chance scale of the Locus of Control construct.

Throughout this paper "he" will be used for simplicity and ease for the reader. "He" will refer to both male and female.

The following definitions applicable to this paper are provided for advance review.

Addiction: A dependence characterized by chronicity, compulsiveness, and uncontrollable urges to use a substance or to perform an activity. The attempt to cut down, control, or stop the activity or use causes severe emotional, mental, and/or physiological reactions. Tolerance develops, prolonging or increasing use of the substance or performance of the activity. Addictions interfere with important social, occupational, or recreational activities (Berman & Siegel, 1992, p. i).

Pathological gambler: A person with an impulse disorder, who suffers from a chronic and progressive psychological disease that is often unrecognized because of its hidden nature (Berman & Siegel, 1992, p. i).

Chapter II

Review of Literature

Narcotics, alcohol and tobacco are the major addictions that are most familiar to Americans. Millions of dollars have been spent educating society on these addictive substances and how destructive they can be to individuals and their families. However, there is a new addiction, unfamiliar to Americans that can be potentially devastating to individuals and families. The addiction of the 1990's is gambling. It is considered by many experts to be what cocaine addiction was to the 1980's (Horn, 1997).

According to Bernard Horn, Political Director for the National Coalition Against Legalized Gambling (NCALG), the fastest growing addiction in America is gambling. Yet it goes undetected and is not perceived to be a problem. According to Horn (1997) there are millions of adult pathological gamblers in America, and millions of teenagers addicted to gambling.

Not only are individuals in society addicted to gambling, but so are state governments. Specifically, state governments are addicted to the income received from the gaming industry in the form of lottery, slot

machines and casinos. Thus, instead of cautioning the general public of gambling's addictive potential, the said governmental organizations end up taking advantage of it's citizens because they need the cash flow to meet governmental expenses (Horn, 1997).

Gambling is a game of chance, which is independent from all constructive risks of living. Most gambling events require little skill. A gambler's skill only slows down the gambler's losses. The house is the only consistent winner when it comes to gambling. The games are so structured that, from a statistical point of view, the odds of winning at gambling is always in favor of the house (Berman & Siegel, 1992).

History of Gambling

Gambling has deep historical roots in America. Gambling in America dates back to the colonial period, in which lotteries where used to fund many of the colonial public structures, churches, and schools. However, during the mid 1800's the loose money quickly led to corruption. By 1893, the Federal Government prohibited lottery sales throughout the United States, due to a lottery scandal in the state of Louisiana.

Gambling ceased to exist as a legal form of generating capitol for state and local governments (Horn, 1997; Simon, 1995).

Although illegal in the United States, gambling continued to thrive in saloons, pubs and halls, with bribes to authorities to disregard the illegal activity (Simon, 1995). The late 1800's and early 1900's is filled with stories about the Old West, gun fights, booze, dancing women and gamblers. For example, Wild Bill Hickok, a glamourized gambler of the late 1800's, was killed in a gun fight in Deadwood, South Dakota during a poker game. Gambling is part of the American spirit and heritage. (Rosa, 1974).

In time, gambling resurfaced in America as a legal entity, and as a new industry (the gaming industry). The first forms of legalized gambling included casino gambling in Las Vegas and state lotteries. In 1963, New Hampshire was the first state to legalize gambling. Thirty six states then followed the lead and legalized lotteries. Legalized casino gambling started in Las Vegas, Nevada and then expanded to Atlantic City, New Jersey in 1974. For years these were the only two states in the union in which gambling was legal (Horn, 1997).

During 1974 and 1988, the gaming industry was considered an expanding industry, with the spread of legalized casino gambling in an additional twenty six (26) states. Seventeen billion dollars per year was spent on legalized gambling during this time period (Horn, 1997). Between 1989 and the present, the gaming industry was considered to be entering the stage of maturity, as gambling became legalized in every state except Utah and Hawaii. In 1992, $329 billion was legally gambled, and by 1995 over $500 billion was legally gambled. This is equal to a 3,200 percent increase in legalized gambling within the last twenty years. The gaming industry is big, big business (Horn, 1997).

Sources of Revenue

Former Senator Paul Simon asserts,

> Local governments, Indian tribes, and States--all desperate for revenue--increasingly are turning to what appears to be quick and easy solution: legalized gambling. And, temporarily, it often works. Poverty-stricken Indian tribes suddenly have revenue. Cities like East St. Louis, IL, with possible urban malady, find themselves with enough revenue to at least take care of minimal services. So when someone comes along and says, 'I have a simple way to get more revenue for you, and you do not have to raise anyone's taxes', that has great appeal to policy makers who must seek re-election. Those same people say to the

> policy makers, 'Not only will I provide revenue for you without taxation, I will be very generous so you when campaign time comes.' And they are (Simon, 1995, p. 3).

Legalized gambling benefits a limited number of businessmen by providing revenue. The benefits received from legalized gambling by the average citizen are very limited. For example, the gaming industry has proposed that casino gambling will provide new jobs and economic expansion. In actuality, once legalized gambling is established in a community it cannibalizes all existing businesses' revenues. Extra money that was once spent on the "extras in life" are now being spent at the casino (Horn, 1997). One example would be the community of Deadwood in South Dakota. Deadwood was the first location that casino gambling expanded to after Las Vegas and Atlantic City. Deadwood was promised jobs and economic prosperity from casino gambling. In reality, the casino industry prospered and the other businesses did not. The new jobs, provided by the casino industry, were mostly minimum wage and did not have benefits. Furthermore, taxes continued to increase each year and crimes associated with gambling addictions continued to escalate (Simon, 1995).

Typically a large percentage of lottery sales come from the poor. Although playing the lottery is a choice and a form of recreation, there is some concern the poor are a target market for the sale of lottery tickets. It would be hoped for, in a prosperous society that there would be a more substantial exit out of poverty other than the dream of winning the state lottery (Simon, 1995).

It seems logical that state and local governments would do their best to promote and sustain legalized gambling, since they receive large amounts of income from the gaming industry. However, states also receive income from the sale of alcohol and tobacco. If state governments advertised and promoted alcohol and tobacco sales, like they promote legalized gambling, there would be a public outcry. Historically, our government has appealed to the strengths of our people and has discouraged taking advantage of the weaknesses of our society (Simon, 1995).

Paul Samuelson, the honorable Noble Prize winning economist, made it perfectly clear there is very little economic gain achieved from legalized gambling. Specifically, Samuelson asserts,

> There is a substantial economic case to be made against gambling. It involves simple sterile transfers of money or goods between individuals, creating no new money or goods. Although it creates no output, gambling does nevertheless absorb time and resources. When pursued beyond the limits of recreation...gambling subtracts from national income (Economics, 1970, p. 36).

Gambling's Cost to Society

According to Grinols and Omorov the societal costs of pathological gambling addiction includes: the cost of arrest, judicial/court costs, prison costs, legal costs, social service costs and finally loss of productivity (1995). Examples of additional social costs include: suicide, car accidents and child abuse (Grinols & Omorov, 1995). Furthermore, the suicide rate for pathological gamblers is one out of five, which is significantly higher than alcohol or drug addiction (Simon, 1995).

The research by Grinols and Omorov showed that fifty (50) percent of all pathological gamblers will commit financial crimes in an effort to get relief from their gambling debts. Examples of financial crimes include: embezzlement, check kiting, credit card fraud, loan fraud, insurance fraud, and tax evasion. Unfortunately, the pathological gamblers who commit

financial crimes rarely have ever committed any crimes before they become involved with this addiction. It is estimated that $1.3 billion worth of insurance related fraud per year is caused by pathological gamblers (Grinols & Omorov, 1995).

A study was designed by the Florida Office of Planning and Budgeting, in 1994, to estimate the expenses that legalized casino gambling would bring to their state. The study clearly demonstrated the cost of incarcerating the pathological gamblers who resorted to crime, would be the most expensive liability associated with casino gambling. That liability was estimated at six billion dollars (Grinols & Omorov, 1995).

The Reason Why Addicts are not Stopped

One would think that casino managers would recognize pathological gamblers and would do something to limit their presence in their casinos. For instance,

> In Atlantic City after pathological gamblers lose all their cash, empty their ATM accounts from the casino teller machines, and can borrow no more, they walk outside the casinos to sell their jewelry and other valuables....And why don't the Atlantic City casinos try to help these miserable customers of theirs? (Horn, 1997, p. 3).

Horn's research indicated the casinos understood the desperate situation of the gambling addiction. However, casinos are in business to make money and they rely on the pathological gamblers for generating a substantial amount of their income (1997).

Grinols and Omorov go on to expand on this situation, by emphasizing that pathological gamblers, who represent 4.11 percent of the gambling population, are responsible for fifty two percent of the casino industry's income (1995). Research conducted by Minnesota's planning agency established that out of Minnesota's seventeen (17) Indian casinos, two percent of the state's gamblers are responsible for sixty three (63) percent of the casino's revenues (Falk, 1995).

It is obvious from the aforementioned research and statistics the gaming industry and government is profiting from those afflicted with gambling addictions (Horn, 1997). Bernard Horn summarized the situation succinctly when he stated, "When an industry is literally exploiting the mentally ill for profit, one might expect government to intervene. But ironically, governments have become addicted to winning

the money that addicted gamblers lose. This irony carves a strange political landscape" (Horn, 1997, p. 4). Such statistics make Grinols and Omorov wonder about the gaming industry's concern for the public and doubt their sincerity in promoting the recovery of pathological gamblers (1995).

Problem Gambling Trends

Lorenz's research shows that pathological gambling has grown from .77 percent of the adult population to as much as eleven percent in numerous states (Lorenz, 1995). "Currently, 5 million to 10 million people in the United States (approximately 2% of the population) can be considered compulsive gamblers. An additional 3% of the population could be considered problem gamblers" (Abbott, Cramer, & Sherrets, 1995, p.214).

According to Abbott et al gambling addictions will continue to escalate at a faster rate than in the past because gambling has become socially acceptable, gambling has become geographically accessible and more of the general population has become emotionally and financially stressed (1995). The more accessible and acceptable gambling is in a society the more widespread

the gambling addiction becomes. As more citizens experiment with gambling, it exposes vulnerable citizens to pathological gambling. Experts also believe that high action gambling, provided for by casinos, maximizes the gambling addiction (Horn, 1997).

Evidence reflects that "Pathological gambling is the most rapidly growing, but ignored, mental health problems in the United States" (Abbott et al, 1995, p. 214). Volberg (1994), goes on to express public concern when he states "The proliferation of legalized gambling in the United States constitutes a public health issue because of the adverse effects that new forms of gambling can have on overall prevalence rates as well as on at-risk groups in the general population" (Volberg, 1994, p.237).

A Comprehensive Federal Study of Gambling

The H.R. 497, the National Gambling Impact and Policy Commission Act, was signed by President Clinton on 03 August 1996. This act established a team, which consists of a nine member federal panel and was initially sponsored by Congressman Frank Wolf (R.VA), Senator Paul Simon (D-IL) and Senator Dick Lugar (R-IN). This commission's goal was to research the impact

that legalized gambling has on its' American citizens (Horn, 1997, p. 3). Bernard Horn indicates,

> The commission was granted an unrestricted power to subpoena documents, research and computer data from the gambling industry. A national study will not solve the gambling problem. But like the 1964 Surgeon General's report on the hazards of smoking, the federal gambling study commission could forever change the perception of gambling in America (Horn, 1997, p. 4).

Pathological Gambler Profile

Pathological gamblers are typically portrayed in the movies to be degenerate bums, losers or as members of the mafia. In reality, pathological gamblers are normal people with numerous superior qualities. A pathological gambler could easily be a judge, a teacher, a businessman, a teenager, a neighbor or a close relative. The best blue-collar and white-collar workers, Type-A personalities, are the most likely to become pathological gamblers. Pathological gamblers tend to be competitive, charming, and highly intelligent. Unfortunately, they have one destructive quality and that is the uncontrollable desire to gamble (Lorenz, 1995).

DSM IV Diagnosis of Pathological Gambler

The DSM IV Diagnosis of a Pathological Gambler includes the following description:

A. Persistent or recurrent mal-adaptive gambling behavior as indicated by at least five of the following:
1. 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. made repeated unsuccessful efforts to control, cut back, or stop gambling
4. restless or irritability when attempting to cut down or stop gambling
5. gambles as a way of escaping from problems or relieving dysphoric mood (e.g., feeling of helplessness, guild, anxiety, depression)
6. after losing money gambling, often returns another day in order to get even ("chasing" ones' losses)
7. lies to family members, therapists, or others to conceal the extent of involvement with gambling
8. committed illegal acts, such as forgery, fraud, theft, or embezzlement, in order to finance gambling
9. has jeopardized or lost a significant relationship, job, educational, or career opportunity because of gambling
10. reliance on others to provide money to relieve a desperate financial situation caused by gambling
B. Not better accounted for by a manic episode (DSM IV, 1994, p. 618).

Diagnostic Features

The fundamental qualities of the pathological gambling disorder are a perpetual or recurrent loss of one's ability to control the drive to gamble. A pathological gambler will increase the

amount of time spent gambling, increase the amount of money that is used for betting, all free time will be occupied with obsessional thoughts about gambling and how to acquire money in order to continue to gamble. Finally, a pathological gambler will continue to gamble in total disregard to any negative consequences associated with the gambling behavior. Most pathological gamblers love to gamble, at least in the beginning stages. This pathological disorder is considered ego-syntonic (Lesieur & Rosenthal, 1991).

Moran (1970), Miller (1980) and Levinson, Gerstein, & Maloff, (1983), have compared the gambling addiction with drug addiction. They discovered that winning money was a benefit from gambling, but what most gamblers desired was "action". A gambler's action is an aroused, euphoric state, which is considered to be equivalent to the "high" derived from cocaine or other drugs. Action can make a person so high, they can go for days without eating or sleeping. Lesieur's (1977) research indicated that pathological gamblers have a craving for action and they develop a tolerance to action. This means they have to bet with larger amounts of money and assume greater risks, to acquire a high, that use to come with smaller bets.

Research indicates that pathological gamblers experience withdrawal symptoms, much like that of a drug addict. It is believed the obsessional thinking and the urge to gamble is accelerated when a person becomes stressed or depressed (Lesieur, 1979). Numerous gamblers have experienced a "rush" from the thought of gambling. This "rush" has the symptoms of sweaty palms, increased heart rate and nausea, can include blackouts (Wray & Dickerson, 1981).

According to Lesieur and Blume, some pathological gambling represents an escape from reality, in which they enter a world of emotional numbness. In this instance, escape takes precedence over excitement. (Lesieur & Blume, 1991).

In order to acquire the needed "high" the gambler will bet more frequently and with more money. Eventually, the gambler runs out of their own money for gambling. When this happens, the pathological gambler will lie, in an effort to acquire more money. When the compulsive gambler is no longer able to borrow money, he or she will exhibit antisocial behavior. Other compulsive gamblers have experienced disassociation, in

which they cannot account for a significant amount of time (Jacobs, 1988; Kuley & Jacobs, 1988; Browne, 1989).

One of the unique qualities of a pathological gambler is the "chasing" phenomenon, which is the uncontrollable urge to continue to gamble in order win back all of one's losses. Chasers use larger amounts of money to make larger bets. They believe that taking greater risks will result in greater wins, which makes up for all of their losses. Whatever logical gambling strategy they previously utilized prior to the addiction, has been abandoned and replaced with irrationally. Most gamblers chase for a limited amount of time. However, the long-term chase is the distinguishing characteristic of a pathological gambler (Lesieur, 1977 and 1979).

Another feature that is typical with compulsive gamblers is the "bailout". Usually when a pathological gambler gets into a desperate financial crisis, they will ask family/friends to help. When family/friends provide requested financial assistance it is considered a "bailout". Rarely do family/friends know the extent of the individual's gambling activity.

The acquisition of funds through a bailout usually leaves the compulsive gambler feeling omnipotent and accelerates a gambling binge (Rosenthal, 1992).

Associated Descriptive Features

Pathological gamblers have distorted thinking and live in a world filled with denial. This denial gives the pathological gambler the illusion of having power and control over their lives (Rosenthal, 1986). Most pathological gamblers believe the lack of money is the cause of their problems and the solution to all of their problems is the acquisition of money (Lesieur & Rosenthal, 1991). However, it is Rosenthal's opinion that a pathological gambler may mistakenly believe that financial independence is the same as emotional independence (Rosenthal, 1986).

Competitive, engergetic, restless and easily bored are typical personality characteristics of pathological gamblers (Custer 1982; Custer & Milt, 1985). Not only do they seek the approval of others, they also like to impress others. In their professions they are typically workaholics, or "binge" workers. Procrastination tends to be the way they manage their personal and professional lives (Lesieur & Rosenthal, 1990).

Associated Mental Disorders

It is not known whether depression occurs as a result of the gambling addiction or if depression preceded the disorder. According to McCormick, Russo, Ramirez and Taber, one reason for gambling is it is an attempt to alleviate depression. In any event, pathological gamblers as a group tend to have high rates of depression (1984). Research indicates that some pathological gambler's also suffer from bipolar disorder and cyclothymia (McCormick et al 1984; Linden, Pope, & Jonas, 1986), attention deficit hyperactivity disorder (Carlton, Manowitz, McBribe, Swartzburg, & Goldstein, (1987), antisocial personality and narcissistic/borderline personality disorders (Rosenthal, 1986). Finally, there is a strong association between pathological gambling and substance dependence (Linden et al 1986; Lesieur, Blume, & Zoppa, 1986; Heineman, 1988). After reviewing the lifestyle of a pathological gambler it should come as no surprise they are candidates for stress related physical disorders (Lorenz & Yaffee, 1986).

The Course of Pathological Gambling

It is usually in a male's teenage years that he

becomes acquainted with gambling, and then the dependence gradually progresses (Custer & Milt, 1985). Rarely does a person become an addict with their first bet. Before gambling became so accessible it normally took fifteen years or more for one to develop a full blown gambling addiction. However, with the accessibility of gambling, a gambling addiction can progress in a very short time span of five years or less (Lesieur, 1986). Research has shown there are four stages in the progression of the gambling addiction. They are winning, losing, desperation and hopelessness (Custer 1982; Custer & Milt, 1985).

Winning

Initially numerous men start to gamble because they seem to have a skill for it and have received praise and admiration for their wins. It is during this time period they have developed a strategy for winning and their excitement for gambling becomes very strong. They start thinking they can beat the system and begin to fantasize about the "big win". Their optimism becomes unreasonable. A large part of their self-esteem is derived from the fantasy of the "future pay-off" from gambling. Their self-esteem is connected

to gambling. Therefore, it is gambling that gives these individuals their self-esteem. This is also the time period where the gambler begins to increase the size of his bets, in anticipation of a bigger win (Lesieur, 1986).

Losing

The losing phase is what the pathological gambler would characterize as, just "bad luck", never admitting the odds were not in his favor from the beginning. He thinks this is something that will pass and that luck will once again be on his side (Rosenthal, 1992). This is also a time period where he realizes that he has an intolerance for losing. It is at this point, when the gambler begins to chase his losses. Chasing, is considered to be the hallmark of a pathological gambler. They will go back to the casino the next day and try to win back the money they lossed. They become obsessed with getting back what they lost (Rosenthal, 1992). Rosenthal's research shows that,

> Previous gambling strategies are abandoned as the gambler tries to win back everything all at once. There is a sense of urgency; bets are made more frequently and heavily. Only the most essential debts are paid as money is to be used for gambling. Covering up and lying about gambling becomes more frequent. As this is discovered,

> relationships with spouse, parents, and children deteriorate. Jobs are exploited for what they can bring; time to gamble and money to pay for it. They use their own and their family's money, go through savings, take out loans, and exhaust all legitimate sources (1992, p. 75).

Eventually, the pathological gambler gets in over his head, a situation in which he is no longer able to ignore. According to Rosenthal when this happens,

> They cannot borrow any more, and faced with threats of physical harm from creditors, or loss of a job or marriage, they go to their family and partially confess. This results in a "bailout". Debts are paid and in return the family extracts only a promise to cut down or stop gambling. For a while they may comply. More likely, there is an upsurge of omnipotence; believing they can get away with anything, they bet more heavily and lose control altogether (Rosenthal, 1992, p. 75-76).

Desperation

It is usually at the desperation stage that a pathological gambler will seek help or is forced to get help for his addiction. Typically, the gambler blames others for his gambling losses, becomes panicky, uses no caution and his self-esteem is ruined. He becomes alienated from his family and now has to lie, steal and cheat to support his gambling addiction (Rosenthal, 1992). It is during this phase that there is a "crossing of the line". Specifically, a pathological

gambler will involve oneself in activities that would have been totally inconceivable and out of character prior to this addiction (Rosenthal, 1992).

Hopelessness

Rosenthal believes,

> For some gamblers, there is a fourth phase in which they realize they cannot get even but they no longer care. This is often a revelation for them and they can pinpoint the moment it occurred. Just playing, they now insist, is all that matters. They often acknowledge knowing in advance that they will lose, and their sloppy play, even when they have the right horse or the winning hand, serves to guarantee it. They want action or excitement for its own sake, and like the laboratory animal with electrodes implanted in its pleasure center, they gamble to the point of exhaustion (1992, p.76).

General Theories on Addictions

After reviewing the devastating affects of a gambling addiction, one has to wonder how and why people become addicted to gambling. According to Milkman and Sunderwith, "People do not become addicted to drugs or mood altering activities as such, but rather to the satiation, arousal or fantasy experiences that can be achieved through them" (1984, p.36).

It appears the fundamental factor that preserves the chosen addictive pattern is that, during the "high", the addict can escape from an unpleasant

reality and experience fantasies of being someone that is important, prosperous, accomplished, influential and respected. Such a fantasy experience is considered a disassociative reaction. These disassociative experiences are frequent with a variety of addictions, including pathological gamblers, alcoholics, and compulsive overeaters (Jacobs, 1982).

The clearest examples of addiction are the pharmacological based, such as alcohol and heroin. However, the more recent theories of addictive behavior include exercise addiction, compulsive gambling and even sexual addiction. The inclusion of the aforementioned addictive behaviors have resulted in a new way of categorizing addictions. Addictions are now categorized as either a process addiction or a substance addiction (Schaef, 1987). Most addiction researchers have the opinion that addiction is an integrated, bio-psycho-social illness and does not occur in isolation (Johnson, 1993).

Consistent with Schaef and Johnson, Pomerleau states that:

> Addiction is the repeated use of a substance or a compelling involvement in behavior that directly or indirectly modifies the internal

> milieu (as indicated by changes in neurochemical and neuronal activity) in such a way as to produce immediate reinforcement, but whose long-term effects are personally or medically harmful or highly disadvantageous to society (Pomerleau, 1988, p. 35).

Pomerleau simplifies this definition and explains the continuation of the addictive behavior when he states "Just as a rat learns to press a bar in order to receive water, the addicted individual learns to continue using the addictive substance to receive reinforcement" (1988, p. 35).

In order to understand the psychological aspect of addiction, it is useful to understand the addiction's function. The primary function of addiction is that of a coping device. The addiction enables the addicted person to "manage and magically control multiple forms of anxiety" (Keller, 1992, p. 224). The addiction is used to keep the addict safe and provide comfort when they are fearful, much like a child's security blanket. The allure of control, provided by the addictive substance/behavior, has little, if any enduring effect on the addict's anxiety. The addiction merely delays the onset or temporarily alleviates the symptoms (Keller, 1992).

Understanding the fantasy and the consoling function performed by the addictive substance is essential to comprehending the addiction. By looking at an addiction as a survival strategy, much of the addiction's attraction becomes clearly visible, as does the addict's continued return to it for reinforcement. Addiction is considered a progressive disease, that will accelerate until it destroys the individual (Schaef 1987; Graham & Glickauf-Hughes, 1992).

As more research is being done in the field of addictions, it appears the different types of addictions have a lot more in common than originally believed. This commonalty became apparent to Litwin (1992) after reviewing the numerous addiction based literature. It was his opinion that "Any one book describes all the addictions and it is a matter of substituting one noun for another in the other books" (Litwin, 1992, p. 30).

Johnson discovered through his research an "underlying psychological sameness" (1993, p. 26) and believed that "Many different addictions will serve the same internal need" (Johnson, 1993, p. 26). Similarities exist between all addictions. For

example, alcoholism, sexual addiction and gambling addiction, although distinctively different in reinforcement styles, are all addictions, thus are similar in nature (Johnson, 1993).

Gambling is considered a mood modifier or a psychotropic experience. Gambling has the ability to change moods and mental states for those who choose to use. Orford believes the mood modifying ability of gambling is so potent that it is equivalent to a drug and has even been compared in strength to heroin (Orford, 1995).

The significance and commonalty between addictions is their mood modifying ability. Examples of psychotropic behaviors include exercise, gambling and sexual behavior. Examples of psychotropic substances include alcohol, cocaine and marijuana. Psychotropic experiences have an altering effect on the mind. Since, the addictive substance/behavior is psychotropic, it makes sense that it is used as a coping device. The aforementioned substances have the ability to make an individual feel better for a brief period of time. It is this brief relief from anxiety that ultimately promotes the addiction within the individual (Orford, 1995).

It has been suggested that some individuals may be either biologically or behaviorally predisposed to addiction. The biological predisposition theory, consists of research on genetics and neurotransmitters. The behavioral predisposition theory consists of research on mental states and upbringing (Edwards & Tarter, 1988).

Genetic susceptibility is a concept that has been the topic of much research. Specifically, researchers believe there is an addiction gene. They believe when this addiction gene is located, it will be the solution to curing addictions (Edwards & Tarter, 1988). Another biological theory, is founded on the belief that an imbalance in neurotransmitter levels in the brain, may make the individual susceptible to addiction (Edwards & Tarter, 1988).

The choice of addiction usually has to meet biological qualifications for that individual. For example, an individual that smokes a cigarette and then becomes physically ill is most likely not going to become addicted to smoking. It is more probable that such an individual will choose a more compatible addiction, such as alcohol or even gambling (Johnson, 1993).

Johnson believes the choice of addiction is random. This would mean the individual would become addicted to whatever was available. However, there are specific predispositions to the types of addiction that will be chosen. Of course, the chosen addiction is affected by one's society, metabolism, heredity, upbringing and availability (Johnson, 1993).

A culture's influence is enormous when it comes to setting standards, promoting values and images. For example, during the 1940s, it was vogue to smoke. Thus, this social norm lead to an enormous nicotine addiction within the United States. Of course, if a society makes a drug, for example nicotine, unavailable to its people, then that specific addiction will not be a problem for that society.

Johnson (1993) believes that luck also plays a role in the choice of addiction. He gives an example of two children with similar backgrounds, each choosing totally different addictions, such as gambling and heroin. He believes that numerous factors influence an individual's addiction choice.

The most important warning signs as to a person's susceptibility to a given addiction is one's attitude

toward addiction. For example, smoking occurs way before the first cigarette is inhaled. Attitudes toward smoking take place before the actual involvement of smoking (Orford, 1985). People become accepting of an addiction due to it being familiar or a way of life (Orford, 1985). A child that is raised in a family of smokers has a high probability of becoming a smoker. Thus, favorable attitudes toward addiction and familiarity with addiction guide an individual toward a particular addiction.

Another view of addiction is that of fixation, in which the addiction begins in infancy. The child, who becomes angry over the loss of control of self, and gains satisfaction at the control of some other object (such as a pacifier), then becomes fixated on external sources of control (Graham & Glickauf-Hughes, 1992). Thus, the child gains control over their emotions through the use of an extraneous object (the pacifier), which is then incorporated into part of the child's being (Graham & Glickauf-Hughes, 1992). Some researchers believe the failure to later move the source of control (from the pacifier) into themselves (internal locus of control) results in an immense

predisposition toward addiction (Graham & Glickauf-Hughes, 1992). Most importantly, an addiction is associated with a pleasurable activity (Johnson, 1993). The basis of this model is the constant progression from fun to self-abuse (Johnson, 1993).

Actual onset of the addiction is different for every person. Essentially, the change from the first use of the addictive object, to experiencing the addictive behavior, is represented by the thorough alteration of the individual's state of balance. While the average person can continue to use the substance or behavior without unusual side-effects, the addicted individual's state of balance is changed into a state of constant conflict (Orford, 1985). Johnson believes the individual who chooses to embrace addiction is unable to deal with fear, guilt, and the increased aggression associated with being an independent person. It appears that a person who is predisposed to addictive involvement has been living with anxiety prior to the addiction and will live with increased anxiety after becoming addicted (Johnson, 1993).

The adaptive theory presents a different position. That is, addictions are adaptive, in they

are preferable than the alternative (Alexander, 1988). In other words, addiction is psychologically preferable to the individual, rather than that of self-hatred. Addiction relieves aggressive feelings through a release and physical impairment (Johnson, 1993).

The individual receives a feeling of confidence and independence from the addiction (Johnson, 1993). For this reason, the individual endures the negative aspects of the addiction, such as guilt, loss of self-esteem, and loss of identity (Keller, 1992). The individual gains self-worth from the addiction and in the process further damages self-esteem. Thus, it is necessary for the individual to continue to use the addiction, in order to produce a normal baseline of esteem. Addiction does not begin when the individual starts to use the substance to relieve negative feelings. Rather addiction begins when the individual employs the addiction as the only method for dealing with negative feelings and external problems (Keller, 1992). Furthermore, addiction can be said to occur when the individual "involuntarily and unintentionally acquires an inability to regulate the activity and has a persistent urge to engage in the activity" (Johnson,

1993, p. 25). Where originally the addiction was used for fun, now the addiction acts as a coping device, which reinforces its own use.

It is believed that pathological gamblers may be driven to gamble by the same motivation that alcoholics have to drink. The research that has been done on the traits of alcoholism provides an understandable motivation for drinking. Specifically, alcoholics believe that drinking gives them greater personal power, and increased self-worth. Thus alcoholics drink because it makes them feel better about themselves (Marlatt & Fromme, 1988). Again, this is another aspect in which addict's characteristics are similar. Research has shown that the majority of addicts exhibit low levels of self-esteem (Marlatt & Fromme, 1988).

The progression and worsening of the addiction, is partially determined by the amount of reinforcement (Orford, 1985). It is easy to comprehend the increase of a drug will harm a person. However, it is more difficult to comprehend how process addictions can be just as harmful. Recent research puts process addiction in the same category as substance addiction. It is Keller's opinion that "Even apparently pure

behavioral disturbances such as compulsive shopping or gambling or exercise, seem to produce a high that functions in much the same way as a drug-induced high...a powerful reinforcer for the behavior" (Keller, 1992, p.223).

Endorphins, a chemical produced in the brain, are released as part of the reinforcement associated with any addiction. Endorphins, act as morphine and reduce any pain felt by the addict (Orford, 1985). Siegel and Shepard, (1988) reported that exercise-caused endorphin release can be classically conditioned, similar to Pavlov's dogs salivating to the sound of a bell. Processes are just as powerful as substance addictions. The intensity of an addiction, is equivalent to the intensity of the reinforcement.

Another aspect in the progression of the addiction is its' ability to consume the individual. When the addiction progresses, the individual becomes preoccupied, and is committed to the addiction. Thus, this is both a behavioral and cognitive commitment. In the case of excessive gambling, there is an overpowering compulsion to gamble, a preoccupation with it, and this anxiety can be relieved through the

gambling behavior. Gambling, similar to uncontrollable drinking, consumes the individual. The desire to terminate the addictive behavior is counteracted by a more powerful force, the consuming quality of the addiction's reinforcement. As the addiction accelerates, there is an absolute character transformation. The addiction has expanded in importance, until it has become over rated and offers more in anticipation than it does in actuality. Finally, the addiction is no longer doing the job that it was initially suppose to do. Unfortunately, by this point, the addiction has become central to the person's identity (Orford, 1985).

Everything that was meaningful to this person prior to the addiction, now becomes secondary in importance, with the addiction as primary importance. According to Keller "All the person's energy, including sexual energy, becomes bound up by the relationship to the addictive substance until the person is no longer living in an object-related world" (Keller, 1992, p.224). The individual's most important relationship has become the one with the addiction (Johnson, 1993). To the addicted individual, everything else has become

unessential, which results in a slow deterioration of interpersonal relationships (Johnson, 1993).

Theories on Gambling Addictions

Richard J. Rosenthal, M.D., has come to believe from his treatment of pathological gamblers, that

> Gambling is a complex activity. The gambling ritual --including the stages of anticipation, playing, and outcome, followed by either triumph or remorse--is an acting out of a meaningful fantasy, in which someone is doing something to someone else. There are rewards and punishments, with specific meanings, both conscious and unconscious, assigned to winning and losing (Rosenthal, 1987 p. 41).

Hans Von Hattingberg provided the first study of gambling addiction in 1914. His analysis showed that anxiety and fear have been eroticized during the gambling experience. Von Hattingberg believed, the eroticized experience was acquired during a period of infancy when urethral-anal striving had been prevented. "Pleasure in fear", or masochism, is the central theme in his work with gambling addictions (Rosenthal, 1987).

Dostoevsky, who was a pathological gambler, produced a novel entitled, The Gambler (1866). This novel was actually a case history of his own gambling addiction experience. It is considered to be an excellent case history of a pathological gambler and

numerous pathological gamblers have reviewed the case and concur with its accuracy (Rosenthal, 1987).

Freud provided an essay entitled Dostoevsky and Patricide (1928) in response to his analysis of The Gambler by Dostoevsky. It was Freud's opinion that Dostoevsky's gambling addiction was really a need for self punishment. According to Freud, it would be necessary for Dostoevsky to lose everything in order to rid himself of guilt (Rosenthal, 1987).

Freud goes on to discuss the issue of patricide as viewed by the pathological gambler. Freud believed the murderous thoughts the gambler had toward his Father was the foundation of his sense of guilt. Central to Freud's analysis is the boy's inconsistent feelings regarding his Father. At times the boy feels he is in competition with his Father and would like to get rid of him, yet he simultaneously feels compassion and love for him. The boy is able to identify with his Father and would like to be in his place, partially out of admiration, but also to remove him as a rival. Of course, in Freud's opinion, the desire to remove the Father would be punishable by castration, which is the basis of the gambler's guilt (Rosenthal, 1987).

Robert Lindner's research on pathological gamblers is similar to the oedipal rivalry with the Father, associated with Freud's work. Lindner believes the pathological gambler's guilt does not come from the gambler's wish that his Father would die, rather through the omnipotent belief that his wishes, to kill his Father, actually killed his Father. When the pathological gambler experiences a win, he believes that hit is confirmation that he is omnipotent. The message the pathological gambler receives is that he can accomplish and do anything he wants, including kill people with his wishes. Thus, winning becomes undesirable and losing has a way of punishing one's bad wishes. The negative consequence with losing is that the pathological gambler is no longer omnipotent. Although, this is consoling, it also adds to the pathological gambler's depression (Lindner, 1958). Consistent with Lindner's findings, Bolen and Boyer report, "The basic, analytic, psychodynamic formulation is that gambling unconsciously represents a forbidden, guilt activation activity" (1970, p. 78).

Edmund Bergler, the second most quoted psychoanalyst on gambling after Freud, holds a similar

view as Freud. That being, the pathological gambler is motivated by guilt, either consciously or unconsciously. Bergler believes the gambling addiction is aimed at relieving the gambler's conscience. According to Bergler, the gambler is rebelling against the reality principal, as well authority figures. The original authority figures, were the parents, who imposed rules that conflicted with the child's pursuit of pleasure. This rebellion consisted of an unconscious hostility toward the parents. Since the display of aggression was unacceptable, the gambler must retaliate and punish himself for these unconscious thoughts (Bergler, 1958).

Bergler believes that pathological gambler's want to experience psychic masochism, which is an unconscious desire for defeat, humiliation, pain and rejection. Since the pursuit of pleasure was reticent, pleasure has become associated with punishment and feelings of guilt. When a pathological gambler is confronted with a sequence of punishments, the individual can only respond by dealing with it the best way possible. For a pathological gambler, the best way to deal with unescapable pain, is to enact the pleasure

principle, which would be to turn pleasure into displeasure. Thus, the creation of the psycho masochist (Bergler, 1958).

In Bergler's experience, pathological gamblers have established a relationship with the world in which they have taken an adverse stance. The pathological gambler views everyone as his opponent, this includes the other players at the poker table, the casino dealer, the craps table or even the stock exchange. It is Bergler's opinion, that pathological gamblers have unconsciously turned everyone into the refusing Mother or the rejecting Father. The pathological gambler's conscious belief is that he will win, but his unconscious knows the reality, which is that he will be rejected and he will lose (Bergler, 1958).

Bergler treated sixty pathological gamblers, with a cure rate of fifty percent. To Bergler, cured meant that his patients gave up the self-destructive pattern associated with gambling. It was at this point the gambling behavior ceased to continue (Bergler, 1958).

Greenson's analysis of five pathological gamblers, led him to believe the pathological gambler confuses his desire for omnipotence, for the belief

that he is indeed omnipotent. It is through the gambling behavior that he sets out to prove that he is omnipotent. It appears as though the gambler is conducting an experiment, in which Fate would give him confirmation of his omnipotence, by allowing him to win when he gambles. According to Greenson, if the gambler could establish omnipotence it would be a way of bringing back the Mother-infant bond. Greenson believes this is a defensive maneuver to counteract a severe depression within the pathological gambler (Greenson, 1947).

Greenson's research has shown some clients started to compulsively gamble after a major life crisis. Common stresses which help to induce a gambling binge are the break up of a marriage or the death of a parent. Specifically, the death of a male gambler's Father. Other pressures include birth of a first child, a business failure, or a promotion. Basically, a pathological gambler can suffer from a failure reaction or a success reaction (Greenson).

Boyd's and Bolen's research showed that pathological gamblers have a preoccupation with the death of their parent(s). Their research implied the

gambler's mania may represent a defensive maneuver. Such a maneuver temporarily removes one from the helpless feelings associated with death (1970).

Charlotte Olmsted has done her research on the psychodynamics of the games of chance. Olmsted used poker as an example, in which the dealer plays a hand, which is in direct competition with the gambler. Thus, according to Olmsted, the dealer represents a culture or a family structure in which the gambler is rebelling against. The game and the players represents the unresolved conflicts within the gambler's life (1962).

Langer's research suggested that gamblers suffer from an illusion of control, in which they acquire by developing gambling strategies. Langer's research showed that when a pathological gambler believed that a game required skill versus a strictly chance scenario, the pathological gambler believed that he would be able to control the game through his personal skills, which would result in a win in his favor. Thus, the illusion of control (Langer, 1983).

Another study was done by Gaboury and Ladouceur in which they utilized the thinking-out-loud method. This method was used with pathological gamblers while

they were engaged in a gambling event. The results showed that seventy percent (70%) of the statements made by pathological gamblers, while they were actually gambling, were irrational (1989).

Anderson's and Brown's (1984) as well as Dumont's and Ladouceur's (1989) research indicates the main motivations of regular gamblers were: (1) to win money, (2) to be social, and (3) for the thrill (1984). According to said researchers, excitement was considered the motivating factor for gambling. It is Boyd's (1976) opinion that excitement is the gambler's drug. Leary's and Dickerson's research showed that committed gamblers responded with more physiological excitement than causal gambler's did during the game. Thus, their research showed that excitement was the most important reason for continued gambling (1985).

Rosenthal has worked with numerous narcissistic clients who had extremely similar risk taking behavior patterns as those of pathological gamblers. Rosenthal labeled this group as "covert gamblers". In Rosenthal's opinion, these covert gamblers tend to test the limits and provoke self-destructive results. They do not gamble at the casino or the race track, rather

they gamble with time and responsibilities. For example, they would gamble by not putting gas in their cars when they were almost on empty, just to test their luck (Rosenthal, 1986).

Subsequent research by Rosenthal has shown these covert gamblers had the same "all or nothing" attitudes as the pathological gamblers when it came to taking risks, or just with life in general. However, Rosenthal believed the basis of this behavior was a poor sense of identity for both types of gamblers (Rosenthal, 1986). Rosenthal also believes that covert gamblers tend to confuse such terms as chance and destiny, by using them interchangably. He believes that this reflects unresolved developmental conflicts that were not resolved along the way to adulthood. As part of the solution, Rosenthal recommends the client develop a sense of mastery of concepts and conflicts associated with chance, luck, fate and finally destiny (Rosenthal, 1986).

Rosenthal's research showed that gambling provides numerous defense mechanisms for the addict. Illusion of power and control, achieved through gambling, can be a way of fighting depression, anxiety,

uncertainty, helplessness and being overwhelmed by the uncontrollable. Gambling can be a desperate attempt to maintain a fragile sense of identity (Rosenthal, 1986).

In Peele's opinion, the best way to fight addiction was to instill values that are not compatible with addiction. This can be done by keeping the locus of control within the individual and not putting it into the abused substance or behavior. An example would be when an addict makes specific life changes that evoke values which compete with addiction. Peele found the best techniques for the elimination of addiction, were the ones which the addicts devised for themselves and were in line with their own life circumstances. Alcoholic and heroin addicts who quit on their own have emphasized powerful and at the same time subtle existential shifts in attitudes about themselves and their addiction. Some unexceptional event often triggered a powerful psychological reaction in the addict. These reactions were connected with other areas of their lives in which the addicts valued. Thus, values had a powerful impact in counteracting addiction (Peele, 1987).

Presently, a major focus of cognitive and

behavioral therapies, is the utilization of the relapse prevention model when working with addictions. Specifically, the relapse prevention model focuses on the internal and environmental factors that influence an individual to recommence the addiction after having quit, rather than focusing on terminating the addiction. Thus, the focus is on the individual's locus of control, rather than on the individual's external locus of control (Marlatt & Gordon 1985; Brownell, Marlatt, Lichtenstein, & Wilson, 1986).

According to Harris and Snow, there is a stage in addiction remission, in which the addict moves past dedicating the majority of their emotional energy to avoiding relapse. Harris and Snow observed this with their obese clients, who successfully maintained long-term weight loss. These recovered overeaters were able to see themselves as valuable people and no longer saw themselves as obese. As recovered overeaters, they developed their own internal locus of control, as to who they were and no longer relied on external supports to maintain their new behavior. According to Harris and Snow, this is a sign their addictive behavior has been cured (1984).

Marsh's research, on 2700 British smokers, showed that a smoker would have to change their thought process in order to completely terminate the addiction. Specifically, smokers had to "lose faith in what they used to think smoking did for them" (1984, p. 20) while creating a "powerful new set of beliefs that non-smoking is, of itself, a desirable and rewarding state" (1984, p. 20). Basically, a new internal locus of control was developed within these individuals, which aided them in living life without addiction (Marsh, 1984).

Locus of Control

According to Robinson, Shaver and Wrightsman (1991),

> Locus of Control refers to assumed internal states that explain why certain people actively, are resilient, and willingly try to deal with difficult circumstances, while others succumb to a range of negative emotions. This failure to act in one's own behalf in trying to remedy an unpleasant situation, in the face potential stress, or in trying to bring about rewarding outcomes is a shared focus of researchers in this area. Whether one focuses upon self-evaluated competence or upon beliefs about causal connections between efforts and outcomes, the interest is in why people act or fail to respond in the face of challenge (1991, p. 413).

Locus of control is developed from a variety of life experiences and influenced by the society in which one lives. The way in which a child is raised is believed to be instrumental in the development of one's locus of control. For example, when a child receives positive reinforcement for behavior, it is associated with the development of internal control. Internal control is where the individual has the belief that generally, outcomes in their life, are due to their own efforts (Liebert & Spiegler, 1994).

External locus of control is where the individual has the belief that generally, outcomes in their life, are due to outside circumstances in which they have no control over. The two scales associated with external control are the powerful others control and the chance control (Liebert & Spiegler, 1994).

When a child receives parental reinforcement, which is driven by social comparison of their child's behavior with other children's behavior, is related to the development of powerful others control. In this situation the child realizes that parental reinforcement is not being driven by their specific behaviors, rather a social comparison of other

children's behavior, which is not within their control. The powerful others control is one of two components of the external locus of control (Liebert & Spiegler, 1994).

The chance control, another component of the external control, is aided in it's development when a child is generally devalued. When a child is devalued without any specific reason, like poor behavior, it assists in developing the chance control within one's locus of control. This is another example, in which a child realizes the devaluement is being generated by forces outside of their control (Liebert & Spiegler, 1994).

Research has shown that a high internal locus of control correlates positively with high self-esteem and high self-efficacy. Individuals that have a high internal locus of control usually report higher job satisfaction than those with a high level of external control (Liebert & Spiegler, 1994).

One's locus of control is considered to be relatively stable. However, research indicates as situations change in one's life, so can one's locus of control. For instance, the results of one study showed

that women's internal locus of control changed to more of an external locus of control, within a short time after their divorce. It is believed they became less internal and returned back to a pre-divorce external locus of control. Perhaps these divorced women came to conclusion through their life experience there are some things in life that are out of ones' control. Perhaps the change in locus of control is a way of dealing with life circumstances.

Similarly, research has shown that freshmen college students, with an external locus of control upon entering college, tended to have an internal locus of control by the end of the college semester. It is believed this change, in locus of control, is due to one taking personal responsibility for the outcome of one's success or failure within the college arena (Liebert & Spiegler, 1994).

Chapter 3

Method

Participants

A total of sixty (60) candidates were requested to participate in this study. Due to a variety of circumstances, the author was only able to acquire

fifty (50) responses. All fifty (50) males were 21 years or older. Twenty five (25) responses were received from male pathological gamblers and twenty five (25) responses were received from male non-pathological gamblers.

The fifty (50) participants who served as subjects were volunteers from The Boeing Company and a Gambler's Anonymous Group. The twenty five (25) (participants) non-pathological Gamblers were chosen as a sample of convenience from The Boeing Company to participate in this study. The twenty five male (25) pathological gamblers were chosen as a sample of convenience from a Gambler's Anonymous Group. The participants included twenty five (25) male pathological gamblers and and twenty five (25) male non-pathological gamblers.

All fifty males were over age 21 years.

Demographics

The pathological gamblers that responded to this survey had the following characteristics.

Pathological Gamblers

Number of Participants	Age Group
2	(21-30 years)
9	(31-40 years)
11	(41-50 years)
2	(51-60 years)
1	(61 -over years)

Number of Participants	Education
1	No High School
1	G.E.D
4	High School
7	Some College
8	Associate Degree
3	Bachelor's Degree
1	Master's Degree

"Are you a pathological gambler?" All of the aforementioned participants answered "yes" to this question, which was a part of the demographics questionnaire.

The Non-pathological gamblers that responded to the survey had the following characteristics.

Non-pathological Gamblers

Number of Participants	Age Group
4	(21-30 years)
7	(31-40 years)
7	(41-50 years)
4	(51-60 years)
3	(61 - over years)

Number of Participants	Education
0	No High School
0	G.E.D.
2	High School
1	Some College
5	Associate Degree
12	Bachelor's Degree
5	Master's Degree

"Are you a pathological gambler?" All of the aforementioned participants answered "no" to this question, which was a part of the demographics questionnaire.

All participants were asked if they would like to participate in the study. No-one was forced to participate and there was not any reward associated with participation. All participants were thanked for their assistance in the study.

Design

Three experimental variables were arranged in a 3 X 2 factorial design. The variable, male pathological gamblers versus male non-pathological gamblers consisted of (1) twenty five male pathological gamblers and (2) twenty five male non-pathological gamblers. The second variable, scales, consisted of (1) Internal Control, (2) Powerful Others and (3) Chance.

Materials

According to Robinson, Shaver and Wrightsman (1991),

> Locus of Control refers to assumed internal states that explain why certain people actively, are resilient, and willingly try to deal with difficult circumstances, while others succumb to a range of negative emotions. This failure to act in one's own behalf in trying to remedy an unpleasant situation, in the face potential stress, or in trying to bring about rewarding outcomes is a shared focus of researchers in this area. Whether one focuses upon self-evaluated competence or upon beliefs about causal

> connections between efforts and outcomes, the interest is in why people act or fail to respond in the face of challenge (p. 413).

The instrument that was utilized in this study was the Internality, Powerful Others and Chance Scales Locus of Control construct developed by H. Levenson in 1981. These scales represent three separate components of the control construct and each are viewed as independent of the other.

> According to Robinson, Shaver and Wrightsman, (1991),
>
> Internality (I) measures the extent to which people believe that they have control over their own lives. The Powerful Others (P) Scale concerns the belief that other persons control the events in one's life. The Chance (C) Scale measures the degree to which a person believes that chance affects his or her experiences and outcomes (p. 425).

Robinson et al further explains,

> The three subscales each comprise eight items with seven-point Likert format that are presented as a unified scale of 24 items. This final scale was derived from a larger measure of 36 items that was reduced following item analysis and correlations with the Crowne-Marlowe Social Desirability Scale. All statements are worded in the first person. The Likert scale ranges from -3 (strongly disagree) to +3 (strongly agree) so that with a constant of 24 added to the total to eliminate negative scores, the range of the scores per subscale is from 0 to 48 (1991, p. 426).

Procedure

Twenty five male pathological gamblers were recruited from a local Gambler's Anonymous group. Twenty five male non-pathological gamblers were recruited from an ethics group at The Boeing Company. Each group arrived for their regular group meeting where the author addressed each group. The author explained to both the Gambler's Anonymous Group and The Boeing Company ethics's group, the intention of the study was to determine the relationship between locus of control and pathological gambling. All subject were given an assurance that information was collected in confidence. Volunteers gave information anonymously.

The two groups of twenty five participants each were given the Locus of Control questionnaire with the instructions, as well as the demographics questionnaire. The author stated that it would be best if the participants answered with their first impression to each of the 24 questions associated with the Locus of Control questionnaire. The author requested that everyone complete the questionnaires and return them to the author by mail or at next week's group meeting. Each participant was given a stamped

self addressed envelop to return the survey to the author, in case they were not able to make the next group meeting.

Chapter 4

Results

Out of the sixty questionnaires that were distributed for this study, fifty questionnaires were returned completed. Twenty five questionnaires were completed by pathological gamblers, with five no responses. Twenty five surveys were completed by non-pathological gamblers, with five no responses.

Variable Results

The results of the t-test, means, medians, modes and Standard Deviations for male pathological gamblers and male non-pathological gamblers comparing each with the Locus of Control scales are presented in Tables 1, 2 and 3. The three groups are listed as Internal Control (Table 1), Powerful Others (Table 2) and Chance (Table 3).

The results associated with each of the three hypothesis of this study are as follows.

Hypothesis 1:

There will be no significant difference between male pathological gamblers and male non-pathological gamblers on the Internal Control scale of the Locus of Control construct.

Results for Hypothesis 1:

The alpha level is .05, the level of significance is .05 and the specific level of probability is <.05. The degrees of freedom is 24, which results in a level of significance of 2.064. The t-test 6.508 is greater than 2.064. Thus, the t-test revealed significant differences between male pathological gamblers and male non-pathological gamblers for the variable of Internal Control with probability <.05, 2-tail significance.

Table 1

A Table Listing the Results for Hypothesis 1 on the Scale of Internal Control

	Internal Control				
Participant	Mean	Median	Mode	SD	t
Pathological Gambler	30	28	24	6.9166	6.508
Non-pathological Gambler	37.44	38	37	11.19	6.508

Hypothesis 2:

There will be no significant difference between male pathological gamblers and male non-pathological gamblers on the Powerful Others scale of the Locus of Control construct.

Results for Hypothesis 2:

The alpha level is .05, the level of significance is .05 and the specific level of probability is <.05. The degrees of freedom is 24, which results in a level of significance of 2.064. The t-test 5.3 is greater than 2.064. Thus, the t-test revealed significant differences between male pathological gamblers and male non-pathological gamblers for the variable of Powerful Others with probability <.05, 2-tail significance.

Table 2

A Table Listing the Results of Hypothesis 2 on the Scale of Powerful Others

	Powerful Others				
Participant	Mean	Median	Mode	SD	t
Pathological Gambler	19.32	22	21	12.52	5.3
Non-pathological Gambler	15.12	15	9/20	7.29	5.3

Hypothesis 3:

There will be no significant difference between male pathological gamblers and male non-pathological gamblers on the Chance scale of the Locus of Control construct.

Results for Hypothesis 3:

The alpha level is .05, the level of significance is .05 and the specific level of probability is <.05. The degrees of freedom is 24, which results in a level of significance of 2.064. The t-test 19.90 is greater than 2.064. Thus, the t-test revealed significant differences between male pathological gamblers and male non-pathological gamblers for the variable of Chance with probability <.05, 2-tail significance.

Table 3

A Table Listing the Results for Hypothesis 3 on the Scale of Chance

	Chance				
Participant	Mean	Median	Mode	SD	t
Pathological Gambler	22.84	22	18	8.974	19.90
Non-pathological Gambler	11.24	12	12	5.595	19.90

In conclusion, the t-test revealed significant differences between male pathological gamblers and male non-pathological gamblers for all three of the variables of Internal Control, Powerful Others and Chance with probability <.05, 2-tail significance. Therefore, based on this data, there are significant differences between male pathological gamblers and male non-pathological gamblers pertaining to the Locus of Control variables of Internal Control, Powerful Others and Chance.

Chapter 5

Discussion

This study was done to determine if there was a significant difference between male pathological gamblers and male non-pathological gamblers in the areas of Internal Control, Powerful Others and Chance utilizing the Locus of Control construct developed by Levenson (1981). The results of the study indicated a significant difference between male pathological gamblers and male non-pathological gamblers in all areas of this study.

The results showed there was a significant difference between male pathological gamblers and male non-pathological gamblers on the scale of Internal

Control. This indicates that male non-pathological gamblers have a greater belief in Internal Control than male pathological gamblers.

The results showed there was a significant difference between male pathological gamblers and male non-pathological gamblers on the scale of Powerful Others. This indicates that male pathological gamblers have a greater expectation of control by Powerful Others than do male non-pathological gamblers.

The results showed there was a significant difference between male pathological gamblers and male non-pathological gamblers on the scale of Chance. This indicates that male pathological gamblers have a greater belief in Chance than do male non-pathological gamblers.

In general, the pathological gambling studies the author reviewed, are congruent with the results achieved in this study. The author was unable to locate any studies that actually utilized the Locus of Control construct comparing pathological gamblers with non-pathological gamblers. Most studies related gambling behavior to that of other addictive behavior.

Some pathological gambling studies focused on

designs using instrument constructs such as wishful thinking (Babad & Yosi, 1991), anxiety/depression (Blaszczynski & McConaghy, 1989), impulsivity, sensation seeking, craving (Coventry & Brown, 1993; Castellani & Rugle, 1995), boredom proneness (Blaszcaynski, McConaghy, & Frankova, 1990), negative affectivity and mood states (Dickerson, Cunningham, Legg, & Hinchy, 1991), all of which are based upon determining the externality of the individual. These studies reflected that pathological gamblers were to some degree externally based.

The studies by Anderson and Brown (1984), Bergler (1958), Greenson (1947), Keller (1992), Lesieur (1977, 1979, 1986, 1987, 1991), Rosenthal (1986, 1987, 1992), all suggest pathological gamblers are externally based individuals. An example of externally based behavior in pathological gamblers would be when they look for comfort from anxiety by external devices/behaviors (Keller, 1992) or when they work out parental conflicts at the poker table (Olmsted, 1962).

Thus, this study has some similarities with previous in regards to pathological gambling being externally based. Specifically, this study showed the

relationship between pathological gamblers and locus of control on the three scales of Internal Control, Powerful Others and Chance.

Limitations

One limitation in this study was the small disparity between male pathological gamblers and male non-pathological gamblers educational level, with the male pathological gamblers having on the average achieved less education. The study would have been better if the educational levels were more evenly matched. However, one must remember that addictions have no prejudices and will cross all boundaries, regardless of educational levels achieved.

One potential limitation was the use of a Gambler's Anonymous Group. Depending on where a person is in their recovery process, could make a difference on how they answer the Locus of Control questionnaire. Pathological gamblers in the depths of their gambling addiction are apt to have a different locus of control than pathological gamblers with years of gambling abstinence behind them.

Another limitation was that too much information might have been given to the two groups prior to their

completion of the demographic survey and the locus of control questionnaire. Specifically, the author informed the participants the intention of the study was to determine the relationship between locus of control and pathological gambling. This information could have influenced the way the participants answered the demographic survey and the locus of control questionnaire.

Finally, a recovered pathological gambler brought to the author's attention a limitation to this study. He believed there needed to be a segregation between pathological gamblers in abstinence and pathological gamblers who are not in abstinence. It was his belief that as a pathological gambler worked a recovery plan that his locus of control would be different than a pathological gambler who was not working a recovery program. He believed that new Gambler's Anonymous members responses to the locus of control would more accurately reflect a pathological gambler in comparison to a pathological gambler who was in recovery. The implication was that an individual's locus of control can change.

Recommendations for Future Research

One recommendation would be to utilize all three variables, Internal Control, Powerful Others and Chance scales of the Locus of Control construct (Levenson, 1981) on a population of pathological gamblers who are in "action" and on a population of recovered pathological gamblers who abstain from gambling. This study would provide results as to the differences in locus of control for these similar but distinct populations.

An even better study would be to do longitudinal research on pathological gamblers. As part of the research each pathological gambler would be requested to complete the Locus of Control questionnaire upon entering a treatment program or possibly when joining a Gambler's Anonymous Group. Then throughout their recovery have the pathological gamblers periodically complete the Locus of Control questionnaire. Such results would be helpful in determining if the pathological gambler was progressing in his recovery program and what areas in his delusional thinking patterns that needed to be addressed. This would also

be an excellent study todetermine if pathological gambler's locus of control changes and if so to what degree.

In conclusion, it is this author's belief that an,individual's locus of control will change, as life circumstances change. Through change there is hope, and without hope there is nothing. To battle an addiction of any kind, whether it be gambling, eating, shopping, alcoholism, cocaine or heroin, there has to be hope and a belief in an addict's ability to change. Without the belief in change, there would not be a need for the counseling profession.

Appendix

Letter of Intent

Demographic Questionnaire

Locus of Control Questionnaire

Dear Survey Participant,

I am a student at Lindenwood College pursuing a Master's Degree in Counseling. I am doing research for my thesis paper, which is a requirement for completion of this degree.

Your participation in this research would help me to complete the required culminating project and hopefully be a benefit to the counseling profession. Please be advised that all participation in this survey is anonymous by design.

Thank you for your participation and support.

Michelle
Graduate Student
Lindenwood College

Demographics

1. What is your gender?

a) Male b) Female

2. What is your age?

a) under 21 b) 21 to 30 c) 31 to 40 d) 41to 50 e) 51 to 60 f) 61 and over

3. What is your educational level?

a) Have not completed High School
b) G.E.D.
c) High School Graduate
d) attended some College
e) Associate Degree
f) Bachelor Degree
g) Master's Degree

4. Do you have a gambling addiction?

a) yes b) no

Locus of Control

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Appendix A: I, P, and C Scales

Directions

On the next page is a series of attitude statements. Each represents a commonly held opinion. There are no right or wrong answers. You will probably agree with some items and disagree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number following each statement. The numbers and their meanings are indicated below:

If you agree strongly: circle +3
If you agree somewhat: circle +2
If you agree slightly: circle +1

If you disagree slightly: circle -1
If you disagree somewhat: circle -2
If you disagree strongly: circle -3

First impressions are usually best. Reach each statement, decide if you agree or disagree and the strength of your opinion, use the one that is closest to the way you feel. Thank You.

Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), Research with the Locus of Control Constructs. Vol. 1, 15-63. New York: Academic Press.

I. P. and C Scales

		Strongly Disagree	Disagree Somewhat	Slightly Disagree	Slightly Agree	Agree Somewhat	Strong Agree
1.	Whether or not I get to be a leader depends mostly on my ability.	-3	-2	-1	+1	+2	+3
2.	To a great extent my life is controlled by accidental happenings.	-3	-2	-1	+1	+2	+3
3.	I feel like what happens in my life is mostly determined by powerful people.	-3	-2	-1	+1	+2	+3
4.	Whether or not I get into a car accident depends mostly on how good a driver I am.	-3	-2	-1	+1	+2	+3
5.	When I make plans, I am almost certain to make them work.	-3	-2	-1	+1	+2	+3
6.	Often there is no chance of protecting my personal interests from bad luck happenings.	-3	-2	-1	+1	+2	+3
7.	When I get what I want, it's usually because I'm lucky.	-3	-2	-1	+1	+2	+3
8.	Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.	-3	-2	-1	+1	+2	+3
9.	How many friends I have depends on how nice a person I am.	-3	-2	-1	+1	+2	+3
10.	I have often found that what is going to happen will happen.	-3	-2	-1	+1	+2	+3
11.	My life is chiefly controlled by powerful others.	-3	-2	-1	+1	+2	+3
12.	Whether or not I get into a car accident is mostly a matter of luck.	-3	-2	-1	+1	+2	+3
13.	People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	-3	-2	-1	+1	+2	+3
14.	It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	-3	-2	-1	+1	+2	+3
15.	Getting what I want requires pleasing those people above me.	-3	-2	-1	+1	+2	+3
16.	Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	-3	-2	-1	+1	+2	+3
17.	If important people were to decide they didn't like me, I probably wouldn't make many friends.	-3	-2	-1	+1	+2	+3
18.	I can pretty much determine what will happen in my life.	-3	-2	-1	+1	+2	+3
19.	I am usually able to protect my personal interests.	-3	-2	-1	+1	+2	+3
20.	Whether or not I get into a car accident depends mostly on the other driver.	-3	-2	-1	+1	+2	+3
21.	When I get what I want, it's usually because I worked hard for it.	-3	-2	-1	+1	+2	+3
22.	In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.	-3	-2	-1	+1	+2	+3
23.	My life is determined by my own actions.	-3	-2	-1	+1	+2	+3
24.	It's chiefly a matter of fate whether or not I have a few friends or many friends.	-3	-2	-1	+1	+2	+3

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