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John H. Carrel

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**Personality Correlates as Predictors of
Severity of Gambling**

John H. Carrel, Jr.

Southern Illinois University at Carbondale

Running Head: PERSONALITY AND SEVERITY OF GAMBLING

Introduction

Gambling has been in existence for thousands of years. Records exist showing that gambling was prevalent in many ancient civilizations such as Rome, Greece, China, and Persia. Today gambling is common world wide and continues to have an impact on society. In 1975, a U.S. survey indicated that sixty percent of all Americans over the age of 18 engaged in gambling of some form (Custer 1985).

From the 1980's up to today, instituting gambling as an alternative form of state taxes has become increasingly more popular in the U.S. Those in favor of lotteries argue that lotteries increase state revenues as well as curbing other illegal forms of gambling. Groups in opposition state that lotteries only increase revenue by a small percent, and that through condoning lotteries undermine society's moral fiber (Thomas and Webb, 1984). Blume agrees, adding that lotteries recruit more and more pathological gamblers and eventually they will need treatment to stop gambling. The states will then have to fund treatment and educational programs costing taxpayers more money thus negating revenue gained from the lotteries (Breo 1989). With the advent of more state lottery programs as well as the increasing numbers of gambling outlets--riverboat gambling, approval of local land based casino gambling (such as Cripple Creek, Colorado), horse and dog racing, off track betting--legalized forms of gambling have become more available and appealing than ever for the average person today.

As history has shown, certain people in society have continually encountered problems with excessive gambling. With the present wide availability of gambling, gambling to excess is becoming more of a social problem in our society. To

examine this problem, we need to look at exactly what gambling is, what pathological gambling is, and current theories regarding pathological gambling.

A basic definition of gambling is when a person risks something, be it money or personal possessions, based on an outcome due somewhat to chance. Gambling can include anything from betting that a quarter will land 'heads' to playing in a football pool to investing in the stock market.

A definition for pathological gambling can prove to be somewhat elusive. The DSM III-R (1989) describes pathological gambling as a mental disorder classified under "Disorders of Impulse Control". There are three criteria one must meet in order to be diagnosed as a pathological gambler: 1) the individual is chronically and progressively unable to resist impulses to gamble, 2) gambling compromises, disrupts, or damages family, personal, and vocational pursuits, and 3) the gambling is not due to Antisocial Personality Disorder. However, this is merely a description of the disorder, not a definition. Galski (1987) defines pathological gambling as an uncontrollable psychological urge to gamble based on a constant progressive disorder of behavior creating an emotional dependence on gambling. The gambling continues, reaching the point where it negatively affects a persons entire life.

Custer (1985) describes six different types of gamblers: professional, antisocial personality, casual social, serious social, relief and escape, and compulsive. A professional gambler gambles as a means of making a living, legally using skill and knowledge of different gambling techniques to make odds work with him or her to win money. Professional gamblers are not pathological,

however, as they can stop at any time and pursue other means to make money.

Examples of the professional gambler include a race horse handicapper and a professional card player.

The antisocial personality gambler is similar to the professional gambler, but they make their living at gambling through illegal means. He or she may fix horse races, play cards with a marked deck or use loaded dice in a game. They are ruthless and without morals when it comes to making money--they will use any means possible. A con artist or an illegal book maker is a good example of an antisocial personality gambler.

Gambling is simply a form of recreation and sociability for the casual social gambler. This person gambles exclusively for a good time, as one of many forms of recreation. The difference between the casual and pathological gambler is that the casual social gambler is not preoccupied with gambling, and does not use it excessively to gain pleasure or gratification in his or her life.

Serious social gambling is similar to casual social gambling in that the person who gambles does so for recreation, sociability, and excitement. The difference is that for the serious social gambler, winning holds much more importance. A casual social gambler does not care whether they win or lose. The serious social gambler is more preoccupied with gambling just as someone else may be preoccupied with another form of recreation, such as running or working. It is possible for a serious social gambler to become a pathological gambler, but not likely because generally one who gambles seriously has other interests in his or her life they are not willing to put aside in order to gamble.

A relief and escape gambler uses gambling as more than just a means of recreation for sociability and excitement. They gamble as a way to get away from an unpleasant situation in their life. While a person who gambles pathologically does so for both the euphoria and the anti-depressant, tension relieving feelings, a relief and escape gambler may gamble only for the latter reason. The relief and escape gambler only gambles to get away from unpleasant situations, and does not have a preoccupation with it. This type of gambler is only in danger of developing into a pathological gambler when situations in their lives are such that they are always escaping, losing all interests in other activities.

The pathological gambler is a person overwhelmed with an uncontrollable urge to gamble. Continuing to gamble until they have lost everything, they risk everything their own and their family's personal possessions to all meaningful relationships in their lives. They may lie, cheat, steal, and even risk lives in order to continue their habit. To the compulsive gambler, gambling becomes the central activity in his or her life--the only source of self-esteem, importance, recreation and excitement, and relief from stress and other crisis. Gambling gradually becomes more and more important in the pathological gamblers life until it dominates life completely.

Suicides over pathological gambling are also not uncommon. Lester (1989) showed the suicide rate at casinos in Atlantic City at double the national average, 2.8%. He explains that more than one fourth of these casino suicides were directly linked to heavy gambling losses. Details on some of the other suicides had some connections to gambling, but not direct. The study did not account for those who

may have gone out of the casinos and committed suicide.

In Breo's article (1989), Blume defines a pathological gambler as having four main characteristics. First, the gambler is preoccupied with thoughts and preparations of gambling. He or she develops a certain tolerance to the action involved in gambling, requiring more gambling and larger bets. Soon the gambler loses control of his or her need to gamble, and eventually the gambling causes problems in many aspects of his or her life, especially in the family and the work place.

The purpose of this study is to see if the higher order scale of Constraint on Tellegen's Multidimensional Personality Questionnaire (1982) is predictive of severity of gambling. The higher order Constraint scale is comprised of three of Tellegen's primary scales--control, harmavoidance, and traditionalism. It is hypothesized that subjects scoring low for Constraint will have statistically significant higher scores on the gambling severity scale for the Severity of Gambling Questionnaire (unpublished).

Of studies attempting to link personality traits to pathological gambling reviewed, it is suggested that other personality questionnaires be used as well as other personality traits (Ciarrocchi, Kirschner, and Fallik, 1991, Malkin and Syme, 1986) to measure pathological gambling. Both of these studies used the MMPI, and suggested that the instrument may not be useful in linking personality traits with pathological gambling. While not measuring specifically for pathological gambling, using the Severity of Gambling Questionnaire allows viewing severity of gambling on a continuum scale as opposed to a cut-off point for pathological

gambling questionnaires.

Method

Subjects

89 GEB-202 students from Southern Illinois University at Carbondale participated in this study and received course credit for the class. The subjects were asked to fill out Tellegen's Multidimensional Personality Questionnaire (MPQ) and Severity of Gambling Questionnaire.

Of the 89 subjects, 2 were dropped from the sample because they exceeded a raw score of 38 the Multidimensional Personality Questionnaire's Index of Invalid Responding (IIR). This is the cutoff recommended by Tellegen (1982). The two subjects high scores on the validity scale indicate that their responses on the questionnaire were too random to be considered valid.

Measures

The MPQ is comprised of eleven primary scales and three higher order scales. The primary scale of Wellbeing is concerned with disposition, self-esteem, and outlooks for the future. Social Potency looks at the subjects leadership, influencing, and persuasion preferences with regard to others. The Achievement scale focuses on one's motivation to work toward achievement of their goals. Social Closeness measures the degree to which a subject likes or does not like associating with other people. Stress Reaction is concerned with a subject's potential reactions to upsetting situations. The Alienation scale deals with a person's reactions to treatment from others--whether they see themselves as a victim or treated fairly. Aggression is concerned with vindictiveness and willingness to take advantage of

another person. Control measures a subject's impulsivity, willingness to be reckless and careless versus rational and sensible. The Harmavoidance scale gauges one's risk-taking preferences in when a potentially dangerous situation comes about, even if other aggravating or tedious safer alternatives are given. Traditionalism examines the subject's morals, values, and authority judgments. High scores would indicate high moral standards, religious beliefs, and conformation to authority while lower scores indicate a degree of questioning these values. The Absorption scale measures a subject's reaction to emotionally engaging sights and sounds, sensory and imaginative experiences (Tellegen 1982).

The three higher order scales of the Multidimensional Personality Questionnaire --Positive Emotionality, Negative Emotionality, and Constraint--are each comprised of several of the 11 primary scales. Positive Emotionality includes Wellbeing, Social Potency, and Achievement (similar to Extraversion). Negative Affectivity encompasses the primary scales of Stress Reaction, Alienation, and Aggression (similar to Neuroticism). The Constraint scale includes Control, Harmavoidance, and Absorption (similar to Psychoticism, but reversed).

Severity of Gambling Scale

The Severity of Gambling Scale was created by the researcher so that gambling intensity could be viewed on a continuous spectrum, rather than having a cut off point to indicate whether a person is a pathological gambler or not. In creating the scale, authored by Carrel, items were chosen from the Severity of Gambling Questionnaire that measured a subject's amount of money risked in gambling, frequency of gambling, and emotional issues involving gambling (questionnaire is

presented in Appendix). Because the range of possible responses for each item differed, a z-score was calculated for each item selected. The items were then summed and averaged, thus creating an average z-score for severity of gambling.

Scale Reliability

After collecting the data, an explanatory factor analysis of the selected items from the Severity of Gambling Scale was executed and the results suggested a one factor solution. This indicated that the items were measuring one meaningful construct. When a two factor solution was forced, there was an overlapping on both scales as well as the two factors correlating to each other ($r = -.56$). These results suggest that both factors measured the same construct, so the one factor solution was chosen. The single scale was created using the items entered into the factor analysis with each item having unit weighting. Cronbach's Alpha was calculated on the scale to assess internal consistency. The alpha coefficient of .86 suggests moderate to high internal consistency.

Results

Multiple Regression analysis was used to assess relationships between severity of gambling and both primary scales and higher order scales of the Multidimensional Personality Questionnaire. Among the primary scales, Aggression was found to be the single best predictor for severity of gambling ($r = .41$). This finding suggests that subjects scoring high on the Aggression scale (vindictive, willing to take advantage of others) would tend to score on the high end of the Severity of Gambling Scale. The second best primary scale for predicting severity of gambling was Harmavoidance ($r = -.25$). A subject with a low score on

the Harmavoidance scale (more willing to take risks) would also tend to have a high score on the Severity of Gambling Scale.

The higher order trait having the best prediction for the Severity of Gambling Scale was Constraint ($r = -.37$). This indicates that one who scores low on the Constraint scale (Control, Harmavoidance, and Traditionalism) will be more likely to score high on the Severity of Gambling Scale. The second best higher order scale predictor for severity of gambling is Positive Affectivity ($r = .23$). Again, this predicts that someone scoring high on the Positive Affectivity scale (Wellbeing, Social Potency, and Achievement) would also tend to score high on the Severity of Gambling Scale.

Discussion

The correlations between personality traits and gambling severity in the present study, while not large, did show statistical significance and warrant suggestion for further research in the area of personality traits and severity of gambling. The hypothesis that subjects scoring low on the higher order scale of Constraint would tend to score higher on the Severity of Gambling Scale was generally supported. A person fitting this profile would be a risk taker that gambles impulsively or even recklessly, having low value systems that justify his or her doing so.

The second best predictor for the Severity of Gambling Scale, Positive Emotionality, suggests that the more extraverted a subject is, the more intensely he or she would be involved with gambling. A person in this category would like the excitement and high profile image that gambling could create for him or her. Becoming successful at gambling would be an ultimate goal for him or her to work

towards.

It is noteworthy that the best primary scale predictor for severity of gambling, Aggression, falls under the higher order scale of Negative Emotionality, the weakest higher order scale predictor for severity of gambling. Worthwhile future research could look at the role aggression plays in severity of gambling.

The Severity of Gambling Scale shows promise in that it measures some single, meaningful construct, but without cross validating the scale with a previously existing gambling questionnaire for convergent validity it cannot be said what the Severity of Gambling Scale truly measures.

The present study was attempting to get a representative population of gamblers, while the actual sample used was college undergraduates taking an Introduction to Psychology course. While most of these subjects are gamblers to some degree, it is hardly a representative population. If a sample were obtained entirely of pathological gamblers, the correlations between personality traits and gambling severity would be expected to be considerably higher. This is suggested because with such a population, there would likely be more subjects scoring extremely high on the Severity of Gambling Scale. In future research, it is suggested that a population with a bigger variety of age and occupational background be used.

Appendix

Gambling Habits Questionnaire

Items chosen for the Severity of Gambling Scale are marked with an asterisk preceding the question number.

Gambling Habits Questionnaire

Demographic Data

1. Sex a. female b. male

2. Age a. 20 or younger d. 36 - 45
 b. 21 - 25 e. 46 - 55
 c. 26 - 35 f. 56 or older

3. Ethnic Origin
 a. African American e. Indian
 b. Asian f. Arabic
 c. Caucasian g. Hispanic
 d. American Indian h. Other _____

4. Socioeconomic Status (household, family)
 a. under 10,000 e. 30,001 - 40,000
 b. 10,001 - 15,000 f. 40,001 - 50,000
 c. 15,001 - 20,000 g. 50,001 or more
 d. 20,001 - 30,000

Gambling Style Questions

5. Look at the list of different types of gambling below. Circle the letter corresponding to any gambling activities (money related) that you have participated in within the last five years.

- a. sports betting (ex. football pools, point spreads)
- b. horse/dog racing (at racetrack or off-track)
- c. lottery (lotto/little lotto, instant lottery, pick three/four)
- d. poker games (at a casino)--includes blackjack, all forms of draw and stud poker, and variations
- e. poker games (private, friendly games)
- f. slot machines (fruit machine or video poker)
- g. roulette
- h. craps (dice)
- i. bingo
- j. other (please specify) _____

- *6. On the average, how much money do you risk each time you participate in a gambling activity?
- a. \$1.00 or less
 - b. \$1.01 - \$5.00
 - c. \$5.01 - \$15.00
 - d. \$15.01 - \$25.00
 - e. \$25.01 - \$50.00
 - f. \$50.01 - \$100.00
 - g. \$100.00 or more

- *7. What is the highest amount of money you have risked in any gambling activity on one occasion?
- a. \$1.00 or less
 - b. \$1.01 - \$5.00
 - c. \$5.01 - \$15.00
 - d. \$15.01 - \$25.00
 - e. \$25.01 - \$50.00
 - f. \$50.01 - \$100.00
 - g. \$100.01 - \$250.00
 - h. \$250.00 or more

- *8. How often do you participate in any gambling activity?
- a. 4 times per year or less
 - b. 6 to 10 times per year
 - c. at least once a month
 - d. 2 - 3 times monthly
 - e. weekly
 - f. 3 - 5 times a week
 - g. daily

9. Take a moment to look at question 5, all the types of gambling you have participated in. Of all the types, list the letter corresponding to your favorite, or preferred type of gambling.

For the next three questions, think only of your preferred/favorite type of gambling.

- *10. On the average, how much money do you risk each time you participate in your preferred type of gambling activity?
- a. \$1.00 or less
 - b. \$1.01 - \$5.00
 - c. \$5.01 - \$15.00
 - d. \$15.01 - \$25.00
 - e. \$25.01 - \$50.00
 - f. \$50.01 - \$100.00
 - g. \$100.00 or more

- *11. What is the highest amount of money you have risked in your preferred gambling activity on one occasion?
- a. \$1.00 or less
 - b. \$1.01 - \$5.00
 - c. \$5.01 - \$15.00
 - d. \$15.00 - \$25.00
 - e. \$25.01 - \$50.00
 - f. \$50.01 - \$100.00
 - g. \$100.01 - \$250.00
 - h. \$250.01 or more

***12. How often do you participate in your preferred gambling activity?**

- a. 4 times per year or less
- b. 6 to 10 times per year
- c. at least once a month
- d. 2 - 3 times monthly
- e. weekly
- f. 3 - 5 times a week
- g. daily

***13. If you were no longer able to gamble at your favorite type of gambling, would you:**

- a. be deeply upset
- b. be quite upset
- c. be a little upset
- d. not be affected whatsoever

***14. Does gambling cause problems in your life in any way?**

- a. No
- b. Yes

15. If you answered yes, what type of problems?

- a. personal (depression, anxiety, etc.)
- b. social (family, relatives, friends)
- c. financial
- d. other (please specify) _____

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