

1-1-2007

The Gambling Functional Assessment (GFA): An Assessment Device For Identification of The Maintaining Variables of Pathological Gambling

Mark R. Dixon
Southern Illinois University, mdixon@siu.edu

Taylor E. Johnson
Southern Illinois University

Follow this and additional works at: <https://repository.stcloudstate.edu/agb>



Part of the [Applied Behavior Analysis Commons](#), [Clinical Psychology Commons](#), [Experimental Analysis of Behavior Commons](#), and the [Theory and Philosophy Commons](#)

Recommended Citation

Dixon, Mark R. and Johnson, Taylor E. (2007) "The Gambling Functional Assessment (GFA): An Assessment Device For Identification of The Maintaining Variables of Pathological Gambling," *Analysis of Gambling Behavior*. Vol. 1 : Iss. 1 , Article 10.

Available at: <https://repository.stcloudstate.edu/agb/vol1/iss1/10>

This Article is brought to you for free and open access by theRepository at St. Cloud State. It has been accepted for inclusion in Analysis of Gambling Behavior by an authorized editor of theRepository at St. Cloud State. For more information, please contact tdsteman@stcloudstate.edu.

THE GAMBLING FUNCTIONAL ASSESSMENT (GFA): AN ASSESSMENT DEVICE FOR IDENTIFICATION OF THE MAINTAINING VARIABLES OF PATHOLOGICAL GAMBLING

Mark R. Dixon & Taylor E. Johnson
Southern Illinois University

The present paper describes the rationale and presents an assessment device for the identification of functional control of pathological gambling behavior. It is suggested in this paper that only through identification of function and eventual treatment based on such function will interventions for the treatment of pathological gamblers become successful. A 20-item self-report format assessment is presented along with the scoring key for the instrument. Suggestions for future research on the psychometrics of the proposed instrument are presented along with implications for use in both research and clinical treatment facilities.

Keywords: gambling, assessment, pathological gambling, addiction, self-report, interview

Treatment of pathological gambling ranges from exclusive reliance upon medications (e.g., Kim, Grant, Adson, Shin, & Zaninelli, 2002) to traditional talk-therapy (e.g., Petry et al., 2006; Ladouceur et al., 2001). Regardless of the type of intervention attempted with a pathological gambler, a first step in the process is the identification of the severity of gambling by a given individual. A variety of assessment devices are available that screen individuals for the potential of being a pathological gambler (e.g. Kim, Grant, Adson & Young, 2001; Johnson, Hamer, & Nora, 1998; Shaffer, LaBrie, Scanlan, & Cummings, 1994).

Perhaps the most commonly used instrument is the South Oaks Gambling Screen

Address Correspondence to:
Mark R. Dixon, PhD, BCBA
Behavior Analysis and Therapy Program
Rehabilitation Institute
Southern Illinois University
Carbondale, IL 62901
E-Mail: mdixon@siu.edu

(SOGS; Lesieur, & Blume, 1987). The SOGS is a 20-item paper and pencil questionnaire designed to identify potential pathological gamblers. A score of 5 or above indicates a probable pathological gambler. The SOGS has reported measures of reliability and validity, and is often used as a screening instrument to indicate potential pathological gambling. Another commonly reported assessment device is the DSM-IVTR criteria (American Psychiatric Association [APA], 2000). The DSM-IVTR classifies pathological gambling as an impulse control disorder characterized by obsession with gambling, and the need to risk more and more money in order to reach previous levels of excitement. This latter assessment is commonly used for billing purposes by therapists to insurance companies for reimbursement.

Beyond the logical importance in therapy, the identification of potential pathological gamblers is useful in research protocols as well. Research on gambling behavior may use the clinical population of interest in cer-

tain experiments and perhaps compare them to a control group of non-pathological gamblers. Other research might explore how certain gambling tasks are approached or avoided dependent on the extent of pathology demonstrated by a known gambler. Regardless of the experiment, researchers need to carefully assess and report the attributes of their subject population. Identification of severity of a gambling disorder is one such characteristic.

However, identification of existence of the disorder, or describing behaviors that are indicative of maladaptation, is only the first step. Once the known pathology is identified, further assessment of what controls or sustains the pathology appears to warrant investigation. Behavioral treatments for pathological gamblers (e.g., Petry, 2005) differ from non-behavioral treatments through their use of an individual, client-specific approach that addresses that specific client's causes for gambling. The function sustaining gambling, while perhaps different for each individual, will tend to center around one of four types of controlling variables: attention, escape, sensory, or tangible. While combinations may be possible, the relative contributing function(s) would be of different intensities. When maintained by attention, a pathological gambler may gamble in order to be around his friends or he may find himself comforted by the disappointment and unconditional love his wife repeatedly shows upon hearing about his gambling losses. In other words, his gambling may be maintained by the attention of others. Or a gambler may gamble as a way to escape from a stressful workday or cope with problems in her personal life. Playing the game takes all the trouble away. In this instance, the gambling behavior may serve an escape function. Alternatively, a gambler may gamble for the rush, the thrill, and the

excitement it brings. Thrill seeking in this way could be considered gambling that is maintained by sensory experiences. Finally, a gambler may gamble simply because of the money she likes to win, the complementary perks she receives at the casino, or the free trip to Las Vegas. Here gambling may be maintained by access to the tangible items associated with the gaming experience.

Functional control of a targeted behavior of interest has been assessed within the field of behavior analysis for many years (Iwata, Dorsey, Slifer, Bauman, & Richman, 1994). Functional assessments may take the form of direct observation (e.g., Millichap et al., 2003), structured interviews (e.g., Kinch, Lewis-Palmer, Hagan-Burke, & Sugai, 2001), and experimental environmental manipulations (Iwata et al., 1994). Perhaps the most easily administered form of functional assessment is the questionnaire (e.g., Durand & Crimmings, 1988). Using a simple pencil and paper task of ranking a variety of sentence-structure items in terms of their relevance to the targeted behavior of interest, the behavior analyst can quickly compute a potential function which maintains that behavior.

While functional assessment questionnaires have been utilized for a number of years in the field of aberrant behavior of persons with developmental disabilities, they are of minimal use for the assessment of pathological gambling because the structure of the questions are not relevant for exploring gambling activity. For example, an item on the Motivation Assessment Scale asks "does this behavior occur when you take away a favorite object, activity or food?" (Durand & Crimmings, 1988). This question is clearly designed for a relevant other of an individual with developmental disabilities to answer. Such questions do not translate directly to a gambling context. Thus, it appears that a

Gambling Functional Assessment

Answer the questions below using the provided scale.

Write the corresponding number next to each question.

Never	Almost Never	Seldom	Half the Time	Usually	Almost Always	Always
0	1	2	3	4	5	6

1. I tend to gamble most frequently when there is nothing else going on or I have nothing better to do. ____
2. I really enjoy the complementary perks that come along with gambling, like free points, drinks, comp coupons, etc. ____
3. I enjoy the social aspects of gambling such as being with my friends or being around other people who are having a good time and cheering me on. ____
4. I often gamble after fighting with my spouse or significant other. ____
5. I feel more alive when I am gambling than when I am doing other types of activities. ____
6. Even if I lose, I can always count on a friend/loved one to help me through this difficult time ____
7. I often gamble when I feel stressed or anxious. ____
8. After I gamble, I like to go out and celebrate my winnings with others. ____
9. When I gamble, I like to accumulate points at a casino so they will offer me incentives and bonuses ____
10. I like the sounds, the lights, and the excitement that often go along with gambling. ____
11. I gamble to get a break from work or other difficult tasks. ____
12. If it were not for the ability to win a bunch of money, I would probably not gamble much at all. ____
13. I only gamble when my friends are gambling with me. ____
14. I often gamble when I am feeling depressed or sad. ____
15. I find myself feeling a rush, and getting excited when I gamble. ____
16. After I gamble, I often find comfort from other people to help me deal with my losses ____
17. If I have a hard day at work, I am likely to gamble. ____
18. I gamble more often when I have been offered complementary drinks, hotel rooms or other items. ____
19. When I gamble, I am often unaware of my surroundings. ____
20. I gamble primarily for the money that I can win. ____

Figure 1. The Gambling Functional Assessment (GFA).

Gambling Functional Assessment: Scoring

Write the number for each question in the following columns. The total score is the total score for each column. Circle the column with the highest total score.

Sensory	Escape	Attention	Tangible
1. _____	4. _____	3. _____	2. _____
5. _____	7. _____	6. _____	9. _____
10. _____	11. _____	8. _____	12. _____
15. _____	14. _____	13. _____	18. _____
19. _____	17. _____	16. _____	20. _____
Total Score: _____	_____	_____	_____

Figure 2. Scoring sheet for the GFA.

questionnaire designed to identify potential controlling variables maintaining gambling would be useful and perhaps yield additional insight into treatment strategy. Also, researchers interested in the use of pathological gamblers may wish to gain additional means of ensuring a homogenous subject pool.

Therefore the purpose of the present paper is to describe an assessment instrument for the identification of potential functions of pathological gambling. Instructions for the scoring of the instrument are also included.

INSTRUMENT OVERVIEW AND QUESTION RATIONALE

The Gambling Functional Assessment (GFA) is a 20-item instrument that requires the person or the interviewer/ clinician/ experimenter to read a single sentence and respond in accordance with the degree to which the statement applies to the individual of interest's gambling behavior on a scale from 0 or "Never" to 6 "Always". The seven choice options include Never, Almost Never, Seldom, Half the Time, Usually, Almost Always and Always. Each option is associated with a number and the selected number is placed in an

underlined space immediately following each question. Figure 1 displays a copy of the GFA. Of the 20 questions, five questions address one of four possible functions maintaining pathological gambling (attention, escape, sensory, or tangible). Randomized in order of presentation across every four questions, the various function-specific questions can be answered in approximately 5 minutes. Once the instrument is completed, scoring is conducted by placing the numbers reported for each of the 20 questions in respective columns shown in Figure 2. The columns are then summed and the column with the largest total suggests the primary function for the individual's gambling behavior.

DISCUSSION

Identification of potential functions of gambling behavior would be beneficial to the practitioner and researcher alike. For the researcher, such identification would allow more insight into the characteristics of his participants. For example, it might be the case that gamblers whose gambling behavior is maintained by sensory experiences may react to the experiment one way, while gamblers whose gambling behavior is maintained

by social attention may respond another way. Also, by identifying the function gambling serves beforehand, researchers could assign their participants to groups in a more homogenous manner.

For the practitioner, such identification could potentially lead to more effective therapy. Such identification would allow the therapist to individualized treatment according to the behavior function. For example, if gambling behavior maintained by escape is indicated, the therapist could arrange a therapy program that focuses on developing other ways to cope with stress. Currently, the most empirically supported treatment for pathological gamblers is an 8-week individual Cognitive Behavioral Therapy program designed by Petry (2005). The second week in this program is devoted to a descriptive analysis of the functions of the individual's gambling behavior. The gambler is encouraged to identify triggers for their gambling as well as the positive and negative consequences of such behavior. The therapist then uses this descriptive analysis to individualize the treatment. The GFA could assist the clinician in verifying the possible functions of the gambling behavior and tailoring the treatment from the beginning of treatment.

While the GFA may have potential clinical utility, more research is needed to test the reliability and validity of this instrument. The test-retest reliability should be examined as well as the internal consistency. However, it is important to note that the reliability and validity of most of the other functional assessment questionnaires have not been examined and yet, these questionnaires have been shown to have some clinical utility. Until this research has been conducted, the GFA should serve as the beginning toward understanding potential function, and should not be viewed as the final product upon which we should govern clinical decision making.

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Durand, V. M., and Crimmins, D. B. (1988). Identifying the variables maintaining self-injurious behavior. *Journal of Autism and Developmental Disorders*, 18, 99-117.
- Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197-209.
- Johnson, E. E., Hamer, R. M., Nora, R. M. (1998). The Lie/Bet questionnaire for screening pathological gamblers: A follow-up study. *Psychological Reports*, 83, 1219-1224.
- Kim, S.W., Grant, J.E., Adson, D.E., Shin, Y.C., & Young, C. (2001). Double-blind naltrexone and placebo comparison study in the treatment of pathological gambling. *Biological Psychiatry*, 49, 914-921
- Kim, S. W., Grant, J. E., Adson, D. E., Shin, Y.C., Zaninelli, R. (2002). A double-blind placebo-controlled study of the efficacy and safety of paroxetine in the treatment of pathological gambling. *Journal of Clinical Psychiatry*, 63, 501-507.
- Kinch, C., Lewis-Palmer, T., Hagan-Burke, S., & Sugai, G. (2001) A comparison of teacher and student functional behavior assessment interview information from low-risk and high-risk classrooms. *Education & Treatment of Children*, 24, 480-494.
- Ladouceur, R., Sylvain, C., Boutin, C., Lachance, S., Doucet, C., Leblond, J., & Jacques, C. (2001) Cognitive treatment of pathological gambling. *Journal of Nervous and Mental Disease*, 189, 774-780.
- Lesieur, H.R. & Blume, S.B. (1987). The South oaks gambling screen (SOGS): A new instrument for the identification of pathological gamblers. *American Journal of Psychiatry*, 144(9), 1184-1188.
- Millichap, D., Oliver, C., McQuillan, S., Kalsy, S., Lloyed, V., & Hall, S. (2003). Descriptive functional analysis of Behavioral excesses shown by adults with Down syndrome and dementia. *International Journal of Geriatric Psychiatry*, 18, 844-854.
- Petry, N. M., Ammerman, Y., Bohl, J., Doersch, A., Gay, H., Kadden, R., Molina, C., & Steinberg, K. (2006). Cognitive-behavioral therapy for pathological gamblers. *Journal of Consulting and Clinical Psychology*. 74, 555-567.
- Petry, N.M. (2005). Prevalence, assessment, and treatment of Pathological gambling: Etiology, comorbidity, and treatment. Washington, DC: American Psychological Association Press.
- Segal, D. L., & Falk, S. B. (1998) Structured interviews and rating scales. In A. S. Bellack, & M. Hersen (Eds.), *Behavioral assessment: A practical*

handbook (4th ed.). (pp. 158-178). Needham Heights, MA: Allyn & Bacon.

Shaffer, H. J., LaBrie, R., Scanlan, K. M., & Cummings, T. N. (1994). Pathological gambling among adolescents: Massachusetts Gambling Screen (MAGS). *Journal of Gambling Studies*, 10, 339-362.

Action Editor: Jefferey N. Weatherly