

## The feasibility of providing gambling-related self-help information to college students who screen for disordered gambling via an online health survey: an exploratory study

Ryan J. Martin

Department of Health Education and Promotion, East Carolina University,  
North Carolina, USA

### Abstract

Individuals with gambling disorders are reluctant to enter formal gambling treatment and often recover without it. For this reason, it is important to provide disordered gamblers with resources that facilitate treatment on their own (i.e., self-help). This exploratory study examined the feasibility of collecting contact information and providing gambling-related self-help information to a sample of college students who indicated possible disordered gambling behavior via an online health survey. Results indicated that among the 60 participants who met the threshold for possible disordered gambling behavior, 29 (48.3%) voluntarily provided their contact information. Subsequently, gambling-related resources were emailed to these participants. The findings of this exploratory study indicate that online health surveys completed by a large number of students might be advantageous for screening and intervening in disordered gambling in this population.

### Résumé

Les joueurs qui présentent des troubles associés au jeu sont réticents à commencer un traitement formel approprié et parviennent souvent à s'en sortir tous seuls. Il est donc important de donner à ces personnes des ressources qui leur permettront de suivre un traitement par eux-mêmes (c.-à-d. auto-assistance). La présente étude exploratoire a examiné la faisabilité de recueillir les coordonnées de ces personnes et d'offrir des renseignements d'auto-assistance liés au jeu à un échantillon d'étudiants de niveau collégial ayant indiqué la possibilité de présenter un comportement de jeu problématique par le biais d'un sondage en ligne sur la santé. Les résultats ont indiqué que parmi les 60 participants qui ont satisfait aux critères fixés pour un comportement possible de jeu problématique, 29 (48,3 %) ont donné leurs coordonnées volontairement. Par la suite, ils ont reçu des ressources liées au jeu

par courriel. Les résultats de cette étude exploratoire indiquent que les sondages en ligne sur la santé remplis par un grand nombre d'étudiants pourraient être avantageux pour dépister les troubles associés au jeu et intervenir auprès de cette population.

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## Introduction

People with gambling disorders are hesitant to enter treatment (Slutske, 2006). Many different situations contribute to this hesitancy, including being ashamed of their circumstance, being unaware that help is available, being uninsured or without financial resources to enter treatment, being of the opinion that they can change on their own, or being repelled by the treatments that are available (Pulford et al., 2009; Suurvali, Cordingley, Hodgins, & Cunningham, 2009). Further, research indicates that many gamblers recover without any formal gambling treatment (Slutske, 2006). Consequently, it is imperative to provide clinical tools (e.g., brief screens) that allow and, under the proper circumstances, encourage individuals with gambling problems to recover on their own (i.e., self-help; Shaffer & Martin, 2011). Researchers found that providing information (in this case, personalized feedback) facilitated improvement in gambling behavior among some individuals who screened for gambling problems (Cunningham, Hodgins, Toneatto, & Murphy, 2012; Cunningham, Hodgins, Toneatto, Rai, & Cordingley, 2009).

The purpose of this brief report is to discuss an exploratory study that assessed the feasibility of collecting contact information and providing gambling-related self-help information to college students who indicated possible disordered gambling behavior (i.e., endorsing three or more pathological gambling (PG) criteria from the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., text rev; *DSM-IV-TR*; American Psychiatric Association, 2000) via a cross-sectional online health survey (i.e., HLTH 1000 Survey).

## Methods

This study was conducting by incorporating the ten *DSM-IV-TR* PG criteria into the online HLTH 1000 Survey in the Spring 2011 semester. The actual *DSM-IV-TR* PG criteria were used as opposed to a *DSM-IV-TR* PG-based measure (e.g., the South Oaks Gambling Screen). Researchers have found that the *DSM-IV-TR* criteria are a valid and reliable indicator of gambling problems (Lahey, Goodie, Lance, Stinchfield, & Winters, 2007; Stinchfield, Govoni, & Frisch, 2005). This study used the threshold of meeting three or more criteria to indicate disordered gambling, which is consistent with the threshold used by other researchers (e.g., LaPlante, Nelson, LaBrie, & Shaffer, 2009), including those who examined

disordered gambling via the National Epidemiologic Survey on Alcohol and Related Conditions (e.g., Chou & Afifi, 2011).

The HLTH 1000 Survey is implemented at the end of every fall and spring semester and is completed by undergraduate students who are currently enrolled in an introductory health course at a large public university located in the southeastern portion of the United States. Students complete the survey on their own time and normally no identifiable information is collected. However, as discussed later, in this study contact information was collected from some of those participants who indicated possible disordered gambling via the *DSM-IV-TR* PG criteria. The HLTH 1000 Survey is used by a number of researchers to assess a multitude of health-related perceptions and behaviors. For instance, my colleagues and I used the HLTH 1000 Survey to examine correlations between disordered gambling, alcohol use, depression, and anxiety (Martin, Usdan, Cremeens, & Vail-Smith, Online first). Because of space constraints, this paper describes only the gambling behavior-related findings of the HLTH 1000 Survey.

Upon completing the HLTH 1000 Survey, students receive a printable receipt and those who submit the receipt to their instructor receive extra credit in the course. Because of this incentive, the response rate of the HLTH 1000 Survey is relatively high. In this study, of the 2,254 students enrolled in HLTH 1000 in Spring 2011, 1,430 (63.4%) completed the survey. Most of these participants were underclassmen ( $n = 1,297$ ; 90.7%), female ( $n = 921$ ; 64.4%), and Caucasian ( $n = 1,031$ ; 72.1%).

After participants completed the *DSM-IV-TR* PG criteria portion of the survey, those who indicated past-year disordered gambling (i.e., endorsing three or more *DSM-IV-TR* PG criteria) were prompted (via a pop-up window) to voluntarily provide their contact information (i.e., name and email) to receive gambling-related information and resources. Participants who gave their contact information were provided with an electronic version of the gambling self-help guide *Your First Step to Change* (2002), the North Carolina Problem Gambling hotline number, and contact information for the university counseling center. Participants who provided contact information received no incentives for doing so. One limitation of this study was not following up with participants after sending them the resources to assess whether the resources were used or behavior change had occurred.

After the online survey was closed, survey responses were automatically uploaded into SPSS software version 14.0 (SPSS Inc., Chicago, IL). The prevalence of participants who met the threshold for possible disordered gambling in the past year was then calculated. In addition, to examine between-group differences, chi-square analyses were conducted to examine differences in demographics (1) between participants who screened for disordered gambling and those who did not, and (2) between disordered gamblers who provided their contact information and those who did not.

## Results/Discussion

Results indicated that 4.2% ( $n = 60$ ) of participants indicated possible disordered gambling behavior in the past year and 2.5% ( $n = 36$ ) endorsed five or more *DSM-IV-TR* PG criteria (i.e., clinical PG). Among the 60 participants who indicated possible disordered gambling behavior in this study, 29 (48.3%) voluntarily provided their contact information and were emailed gambling-related information and resources.

Table 1 lists the number of *DSM-IV-TR* PG criteria endorsed and the demographic measures of those participants who (1) met the threshold for disordered gambling behavior ( $n = 60$ ) and (2) did not meet the threshold for disordered gambling ( $n = 1370$ ). In addition, chi-square analyses were conducted to examine between-group differences in demographics (i.e., gender, race/ethnicity, class status) for participants who screened for disordered gambling and those who did not. As indicated in Table 1, gender was the only demographic variable for which significant differences were observed, as males were significantly more likely ( $p < .001$ ) to meet the threshold for disordered gambling.

Table 1  
*DSM-IV Pathological Gambling Criteria Endorsed and Demographic Measures Among Participants Who Screened for Disordered Gambling ( $n = 60$ ) and Participants Who Did Not ( $n = 1370$ )*

	Disordered Gamblers ( $n = 60$ )	Non-Disordered Gamblers ( $n = 1370$ )	Pearson $\chi^2$	$p$ -Value
	$N$ (%)	$N$ (%)		
<b>Sex</b>			16.34	< .001
Female	24 (40.0)	898 (65.5)		
Male	36 (60.0)	472 (34.5)		
<b>Race/ethnicity<sup>a</sup></b>			.01	.884
Caucasian (non-Hispanic)	43 (71.7)	989 (72.1)		
African American (non-Hispanic)	12 (20.0)	217 (15.8)		
Hispanic or Latino	3 (5.0)	45 (3.3)		
Asian or Pacific Islander	0 (0.0)	53 (3.9)		
American Indian or Alaskan Native	1 (1.7)	10 (0.7)		
Other	1 (1.7)	0 (0.0)		
<b>Class status</b>			.44	.492
Underclassmen (Freshman/ Sophomore)	53 (88.3)	1245 (90.9)		
Upperclassmen (Junior/Senior)	7 (11.7)	125 (9.1)		

<sup>a</sup> Groups for chi-square analysis were Caucasians and non-Caucasians.

Table 2  
*DSM-IV Pathological Gambling (PG) Criteria Endorsed and Demographic Measures Among Participants Who Screened for Disordered Gambling and Provided Their Contact Information (n = 60) and Those Who Screened for Disordered Gambling and Did Not Provide Their Contact Information (n = 1370)*

	Provided Contact Information (n = 29)	Did Not Provide Contact Information (n = 31)	Pearson $\chi^2$	p-Value
	N (%)	N (%)		
<b>DSM-IV PG criteria endorsed</b>				
3	6 (20.7)	7 (22.6)		
4	6 (20.7)	5 (16.1)		
5	7 (24.1)	6 (19.4)		
6	4 (13.8)	7 (22.6)		
7	2 (6.9)	2 (6.5)		
8	4 (13.8)	0 (0)		
9	0 (0)	2 (6.5)		
10	0 (0)	2 (6.5)		
<b>Sex</b>			.71	.440
Female	10 (34.5)	14 (45.2)		
Male	19 (65.5)	17 (54.8)		
<b>Race/ethnicity<sup>a</sup></b>			1.62	.258
Caucasian (non-Hispanic)	23 (79.3)	20 (64.5)		
African American (non-Hispanic)	5 (17.2)	7 (22.6)		
Hispanic or Latino	1 (3.4)	2 (6.5)		
American Indian or Alaskan Native	0 (0)	1 (3.2)		
Other	0 (0)	1 (3.2)		
<b>Class status</b>			.25	.702
Underclassmen (Freshman/ Sophomore)	25 (86.2)	28 (90.3)		
Upperclassmen (Junior/Senior)	4 (13.8)	3 (9.7)		

<sup>a</sup> Groups for chi-square analysis were Caucasians and non-Caucasians.

Nearly half of the eligible participants in this sample voluntarily provided their contact information with no incentive to do so. Table 2 lists the number of *DSM-IV-TR* PG criteria endorsed and the demographic measures of those participants who met the threshold for disordered gambling and (1) provided their contact information (n = 29) and (2) those who did not provide their contact information (n = 31).

In addition, chi-square analyses were conducted to examine differences in demographics (i.e., gender, race/ethnicity, class status) between disordered gamblers who provided their contact information and those who did not. As indicated in Table 2, there were no significant differences observed between the demographic

groups. Thus, the willingness to provide contact information did not vary by gender, race/ethnicity, or class status among those who met the threshold for disordered gambling in this sample.

This exploratory study has several limitations. The first is that no follow-up was done with participants who received the self-help materials. It would be valuable to do so to examine whether the participants used the resources and whether they experienced positive changes in their gambling behavior. Another potential limitation concerns selecting only disordered gamblers to receive self-help information. Given the past-year framework, it is possible that past disordered gamblers could be in remission and could potentially relapse, or that those who currently exhibit seemingly non-problematic gambling practices might adopt more disordered gambling behaviors in the future. Thus, in future studies, it might be advantageous to send gambling-related self-help materials and other resources to all gamblers, regardless of disordered status. This broader inclusion criterion will allow for a greater reach and prevent the exclusion of potential gamblers who might need help.

Despite these limitations, it appears that online health surveys completed by a large number of students might be advantageous for screening for possible disordered gambling and providing gambling-related self-help information among this population, as nearly half of eligible participants provided their contact information without any incentives. College health professionals with an interest in screening and providing gambling-related self-help information to college student gamblers might want to consider incorporating a gambling screen into existing campus health surveys. Disordered gambling screening options include the 10-item *DSM-IV-TR* PG criteria or a shorter screen, such as the three-item Brief Bio-Social Screen (Gebauer, LaBrie, & Shaffer, 2010).

This exploratory study lends credence to further investigation of screening and providing gambling-related self-help information for possible disordered gambling via online health surveys in this population. Researchers should also consider testing and exploring the utility and effectiveness of various self-help interventions. Further, because disordered gamblers often experience co-occurring psychiatric disorders (e.g., anxiety, depression, substance abuse; Kessler et al., 2008; Petry, Stinson, & Grant, 2005), it might be useful to also screen and intervene for co-occurring disorders and tailor interventions accordingly. Finally, in future studies, researchers should consider providing incentives to examine whether this additional step increases the response rate for providing contact information among eligible participants.

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For correspondence: Ryan J. Martin, Ph.D., Department of Health Education and Promotion, East Carolina University, 2206 Carol Belk Hall, Greenville, NC 27858. Tel: (252) 7373-1939. Fax: (252) 328-1285. E-mail: martinry@ecu.edu

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Dr. Martin is an assistant professor in the Department of Health Education and Promotion at East Carolina University (ECU). His research interests include addictive behavior and mental health in general, and disordered gambling in particular. Prior to his appointment at ECU, he was the Thomas N. Cummings postdoctoral research fellow at the Division on Addictions and Massachusetts Council for Compulsive Gambling. He received his Ph.D. in Health Education and Promotion from the University of Alabama in 2008.