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PSYCHOMETRIC PROPERTIES OF SPANISH TRANSLATIONS OF THE
GAMBLERS' BELIEFS QUESTIONNAIRE AND GAMBLING SELF-EFFICACY
QUESTIONNAIRE

by

Walter R. Winfree

A Thesis

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Abstract

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Hispanics are the fastest growing minority group in the U.S. and there is a need for valid assessment measures for researchers and clinicians that work with Spanish-speaking gamblers. Spanish versions of self-report measures of gamblers' cognitive distortions (Gamblers' Beliefs Questionnaire; Steenbergh, Meyers, Whelan, & May, 2002) and self-efficacy to control gambling behavior (Gambling-Self-Efficacy Questionnaire; May, Whelan, Steenbergh, & Meyers, 2003) were translated and psychometrically evaluated in a sample of 219 Hispanics residing in the South U.S. The GBQ and GSEQ showed good internal consistencies ($\alpha = .95$; $\alpha = .99$, respectively). Factor analytic data revealed factor structures similar to the initial English psychometric evaluations. Problem and pathological gamblers scored significantly higher on the GBQ than non-problem gamblers. However, no significant differences were found among these groups on GSEQ scores. Prevalence of gambling and types of gambling activities were also assessed. Greater acculturation was associated with higher likelihood of gambling participation.

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INTRODUCTION

We know little about gambling behavior among ethnic minorities in the United States. This is unfortunate because the prevalence of problem and pathological gambling appears to be higher among American minorities than among Caucasians (Volberg, 1996; Welte, Barnes, Wieczorek, Tidwell, & Parker, 2004). Understanding and treating gambling in minorities will require culturally appropriate assessment tools. Toward that end this study will assess gambling behavior of Hispanics in a south-central U.S. metropolitan area and examine the psychometric properties of Spanish translations of The Gamblers' Beliefs Questionnaire (GBQ; Steenbergh, Meyers, Whelan, & May, 2002) and the Gambling Self-Efficacy Questionnaire (GSEQ; May, Whelan, Steenbergh, & Meyers, 2003).

According to the U.S. Census Bureau (Ennis, Ríos-Vargas, & Albert, 2011), from 2000 to 2010 the Hispanic population increased by 43% to 16% of the total U.S. population and accounted for more than half the nation's growth. This trend is projected to continue with Hispanics estimated to reach 29% of the nation's population by 2050 (Pew Research Center; Passel & Cohn, 2008). This growing Hispanic community may face a significant gambling problem. One national survey found that the prevalence rate of past-year problem or pathological gambling among Hispanics (7.9%) was more than 4 times the rate of Caucasians (1.8%) (Welte, Barnes, Wieczorek, Tidwell, & Parker, 2002). A second national survey reported that the lifetime prevalence rate of pathological gambling among Hispanics (1%) was equivalent to that of Caucasians (1.2%) (Alegría et al., 2009). Clearly there is a need to better understand gambling behavior among the fastest growing minority group in the U.S.

To date, only 7 studies have focused on the gambling behavior of Hispanics living in the U.S. Four of these investigations suggested that Hispanics are at a higher risk for gambling problems than Caucasians. Stinchfield (2000) examined gambling among Minnesota public school students and found that 9.5 % of Hispanic adolescents gambled daily compared to 4% of Caucasian adolescents. A second study found that Hispanic adolescents in Texas were more likely to gamble weekly and to have higher rates of pathological gambling than Caucasian adolescents (Wallisch, 1996). Westermeyer, Canive, Garrand, Thuras, and Thompson (2005) revealed that the lifetime pathological gambling prevalence rate of Hispanic American Veterans residing in the southwest and north central regions of the U.S. was 4.3%, a rate almost 1% higher the rate observed in the general population. The fourth study compared samples of old and young adult problem gamblers and found that Hispanic respondents made up a greater proportion of the younger adult group while Caucasians accounted for a higher proportion of the older adult group (Potenza, Steinberg, Rounsaville, & O'Malley, 2006).

Momper, Nandi, Ompad, and Delva (2009) investigated gambling behavior among undocumented Mexican immigrants residing in New York City and revealed several interesting findings. Approximately 53% reported gambling at some point in their lives, a rate lower than past-year gambling estimates for a nationally representative sample of Hispanics (83%; Welte et al., 2002). General U.S. population estimates for gambling participation over the past year have ranged from 63% - 82% (Gerstein et al., 1999; Welte et al., 2002). Moreover, 78% of Mexican immigrant males and 22% of females reported ever gambling, a sharp difference as compared to general U.S. population estimates (66.8% for males and 59.3% for females; Potenza, Maciejewski, &

Mazure, 2006). The most common gambling activity engaged in among those who reported gambling in their lifetimes was scratch and win tickets or lotteries (43.9%). As for the immigration experience, those who reported higher levels of linguistic and social acculturation were more likely to have gambled in their lifetime. Furthermore, the odds of gambling participation were higher among those who sent money back to family or friends in Mexico. These findings suggest that the rate of gambling participation among undocumented Mexican immigrants is lower than the general population, and that gambling participation among this group may increase with acculturation and financial stability in the U.S.

A recent study of a nationally representative sample examined differences among Hispanic and Caucasian adults in associations between past-year problem gambling severity and past-year Axis I and Axis II disorders (Barry, Stefanovics, Desai, & Potenza, 2011). Past-year psychiatric disorders were associated with gambling problem severity for Hispanics and Caucasians. However, Hispanics who exhibited subsyndromal levels of gambling showed higher rates of anxiety, mood, and substance use disorders than Caucasians. Additionally, the odds ratios of a personality disorder were larger among Hispanic subsyndromal gamblers than Caucasian subsyndromal gamblers. These findings highlight the importance of understanding the relationship between problem gambling severity and psychiatric disorders, especially among Hispanic gamblers.

A final investigation compared Caucasian (96.2% of callers) and Hispanic callers (3.8%) to a gambling assistance hotline in Florida (Cuadrado, 1999). Researchers found that Caucasians were more likely to call about themselves and were over twice as likely to have sought previous help for a gambling problem. In sum, it appears that Caucasians

and Hispanics gamble at similar rates. However, Hispanics have shown to gamble more problematically and may be less likely to seek assistance. These differences suggest the need for culturally appropriate prevention and treatment programs.

Gambling availability has increased in low SES areas (Gerstein et al., 1999). These new gambling opportunities are thought to attract individuals with limited financial resources who might view gambling as a source of entertainment and a quick way to earn large amounts of money (Gill, Dal Grande, & Taylor, 2006). Unfortunately, those from disadvantaged neighborhoods gamble more problematically than those in more affluent areas (Welte, Wieczorek, Barnes, Tidwell, & Hoffman, 2004). This is of concern for Hispanics because the poverty rate for this population is 25.3% (U.S. Census Bureau; DeNavas-Walt, Proctor, & Smith, 2009). Furthermore, researchers found that the percent of Hispanics living in an area significantly predicted lottery outlet density (Middlesex County, New Jersey; Wiggins, Nower, Mayers, & Peterson, 2010). Investigations are needed to examine how Hispanics are being affected by this increase in gambling availability.

One barrier to serving this population is the limited set of assessment tools available for researchers and clinicians who work with Spanish-speaking gamblers. Two Spanish-translated diagnostic tools (*DSM-IV Diagnostic Criteria*; Jiménez-Murcia et al., 2009 and *South Oaks Gambling Screen*; Echeburúa, 1994) have been psychometrically validated; however, there are currently no valid and reliable Spanish-translated cognitive assessment measures. There is growing support for the efficacy of cognitive-behavioral treatments for problem gambling (Toneatto & Ladouceur, 2003), and the need for valid cognitive assessment measures to aid in these efforts led to the development of the

Gamblers' Beliefs Questionnaire (GBQ) and the Gambling Self-Efficacy Questionnaire (GSEQ).

The literature suggests that gambling-related cognitive distortions play a role in maintaining problem gambling (Croson & Sundali 2005; Ladouceur, 2004; Toneatto, 1999). A number of cognitive distortions have been identified among gamblers, including overestimation of skill-orientation and misunderstanding of random events (e.g., Ladouceur, 2004). The Gamblers' Beliefs Questionnaire (GBQ) is a 21-item self-report questionnaire used to assess gambling-related cognitive distortions (Steenbergh et al., 2002). Prior to the development of the GBQ, cognitive distortions among gamblers were measured through "think-aloud" methods (e.g., Ladouceur, 2004) and inferences from observations of gamblers' behavior (e.g., Croson & Sundali, 2006). The GBQ has served as a valid and time-efficient measure of cognitive distortions for researchers (Dorion & Nicki, 2007; Matheson, Wohl, & Anisman, 2010; May, Whelan, Meyers, & Steenbergh, 2005; Mitrovic & Brown, 2009; Moodie, 2007; Myrseth, Brunborg, & Eidem, 2010; Wohl, Young, & Hart, 2005, 2007; Xian et al., 2008; Young, Wohl, Matheson, Baumann, & Anisman, 2008).

The Gambling Self-Efficacy Questionnaire (GSEQ) is a 16-item self-report questionnaire used to assess an individual's perceived self-efficacy to control gambling behavior in a variety of potential high-risk gambling situations (May et al., 2003). Cognitive measures that assess perceived self-efficacy to control addictive behaviors are useful in monitoring behavior change, predicting maintenance of treatment gains, and identifying potential relapse situations (Diclemente, Fairhurst, & Piotrowski, 1995). The instrument is based conceptually on the high-risk relapse situations for addictive

behaviors developed by Marlatt (1985), and was modeled on the Situational Confidence Questionnaire (Annis & Graham, 1988), which was designed to assess an individual's perceived ability to control alcohol consumption during a variety of high-risk situations. The GSEQ has been used in the literature as a valid and time-efficient measure of perceived gambling self-efficacy (Gomes & Pascual-Leone, 2009; Kaur, Schutte, & Thorsteinsson, 2006; Martin et al., 2010; Weinstock, Whelan, Meyers, & McCausland, 2009).

Clearly there is a need to be able to monitor cognitive variables among Spanish-speaking gamblers. The Gamblers' Beliefs Questionnaire (GBQ) and the Gambling Self-Efficacy Questionnaire (GSEQ) are promising cognitive assessment measures that should be adapted for use with Spanish-speaking gamblers. The objectives of this study are to assess the gambling behavior of Hispanics in a south-central U.S. metropolitan area and examine the psychometric properties of Spanish translations of the GBQ and the GSEQ. Fulfilling these objectives should help to better understand gambling behavior among Hispanics living in the U.S. and aid in the development of culturally appropriate gambling assessment tools for this rapidly increasing population.

METHOD

Translations

The GBQ and GSEQ were translated into Spanish using the back-translation procedure (Brislin, 1970). The translation team consisted of a professor of Spanish, a Spanish literature doctoral student, a university Spanish instructor, and a psychology graduate student. The translators were of different Spanish-speaking nationalities in order to eliminate parochial wording. The first translated the measures from English into

Spanish. A second translator checked for and corrected linguistic and grammatical errors of the Spanish-translated versions. The third translated the Spanish-translated versions back to English. Consistencies among the original versions and back-translated versions were examined by two of the authors of the original scales. Finally, a fourth translator assisted in several wording revisions of the final Spanish-translated version.

Several modifications of the Spanish versions were conducted in order to address English colloquialisms. The colloquialism “near misses” on GBQ item 7 did not directly translate to Spanish. In order to retain the meaning of “near misses” we used the Spanish phrase “perdí por un pelo” which in English means “to lose by a hair” or “to lose narrowly.” There was no direct translation for the colloquialism “on the town” in GSEQ item 13 (“I would be able to control my gambling if I were out with friends “on the town” and wanted to increase my enjoyment”). The translation team decided that the item retained meaning without including the phrase “on the town”. Therefore, the final Spanish item translated as (“I would be able to control my gambling if I were out with friends and wanted to increase my enjoyment”). There was also discussion as to the appropriate verb for “to gamble” in Spanish. The translation team suggested that using “apostar” (English: to bet, to wager, to gamble) may reduce confusion that could be created by using “jugar” (English: to play, to gamble).

Participants

Purposive sampling (Shadish, Cook, & Campbell, 2002) was used to obtain a sample that demographically represented the local Hispanic population (U.S. Census Bureau, 2000). Individuals were recruited from a variety of locations, including churches, restaurants, markets, non-profit outreach centers, and an urban public

university. The experimenters approached potential community participants and engaged them in conversation about the objectives, eligibility criteria, 20 minute time requirement and the voluntary and anonymous nature of the study. University participants were recruited from the psychology department undergraduate research pool and were informed that they would receive research credit for participating.

Participants included 219 adults over the age of 18 years. A large majority of the entire sample (87.2%) identified as Hispanic or Latino/a in the free response item for the ethnic group that best described them, but 28 (12.8%) individuals failed to answer the item. Participants ranged in age from 18 to 82, with a mean age of 33.6 years ($SD = 11.8$). The sample was 52.5% female ($n = 115$). Approximately, 56% ($n = 122$) were married, 37.4% ($n = 82$) were single, and 6.4% ($n = 14$) were divorced, separated, or widowed. A higher proportion of males than females were single (46.6% v. 28.3%, respectively, $\chi^2(2, N = 216) = 8.06, p < .05$), and a higher proportion of females were married than males (62.8% v. 48.5%, respectively, $\chi^2(2, N = 216) = 8.06, p < .05$). Thirty-five percent of the sample ($n = 77$) reported having less than a high school education, 39.7% ($n = 87$) confirmed having a high school diploma or equivalent, and 25% ($n = 51$) reported having a bachelor's degree or higher. A large majority of the sample (80.8%; $n = 177$) were born outside of the U.S., and approximately half of the sample (49.3%; $n = 108$) reported sending money to family or friends in other countries. Of those who were born outside of the U.S., approximately half (49.7%, $n = 88$) entered the U.S. to live after the year 2000. According to the Short Acculturation Scale for Hispanics (SASH), 84% ($n = 184$) reported low linguistic and social acculturation/preferences. See Table 1 for additional demographic information.

Table 1

Demographic Characteristics of Total Sample (N = 219)

<i>Variable</i>	<i>n</i>	<i>%</i>	<i>M</i>	<i>SD</i>
Age (Years)	219	-	33.2	11.84
Sex				
Female	115	52.5	-	-
Male	104	47.5	-	-
Marital Status				
Single	82	37.0	-	-
Married	122	55.7	-	-
Separated	5	2.3	-	-
Widowed	1	.5	-	-
Divorced	8	3.7	-	-
Did not report	1	.5	-	-
Education				
Primary/Elementary	24	11.0	-	-
Secondary/Middle	53	24.2	-	-
High School	87	39.7	-	-
Bachelors/Licenciate	40	18.3	-	-
Master's	10	4.6	-	-
Doctorate	1	.5	-	-
Did not report	4	1.8	-	-
Born Outside of U.S.				

Table 1 (continued)

<i>Variable</i>	<i>n</i>	<i>%</i>	<i>M</i>	<i>SD</i>
Yes	177	80.8	-	-
No	42	19.2	-	-
Send \$ to others in other countries				
Yes	108	49.3	-	-
No	104	77.5	-	-
Did not report	7	3.2	-	-
Typically Drink Alcohol while Gambling				
Yes	32	14.6	-	-
No	176	80.4	-	-
Did Not Report	11	5.0	-	-

*U.S. \$

Materials

Demographics and Gambling History Questionnaire (see appendix A). This self-report Spanish language measure was used to obtain socio-demographic characteristics: gender, age, ethnicity, education, marital status, income, and residency status. The measure also requested year entered the U.S. to live and whether or not the individual sent money to family or friends in their home country. Frequency of gambling, betting habits, alcohol consumption while gambling and prior treatment for a gambling problem were also assessed.

South Oaks Gambling Screen - Spanish Version (SOGS; Lesieur & Blume, 1987; see appendix B). This 16-item self-report measure was used to identify problem and pathological gambling during the past year. Scores range from 0 to 20 with a score of 3 or greater indicating problem gambling and a score of 5 or greater indicating pathological gambling. Past-year prevalence of gambling, gambling frequency, and types of gambling activities were assessed by asking the participant if he or she had participated in any of the following types of gambling: cards, animal races or fights, sports, lottery, casino, bingo, stock market, slot machines, bet on a game of skill (bowling, pool, golf, or others), and gambled in another way not previously mentioned. Response options for the frequency of participation were, 1 (not at all), 2 (less than once a week), and 3 (once a week or more). A Spanish version of the SOGS demonstrated good internal consistency ($\alpha = .94$) and high test-retest reliability ($r = .98$; Echeburúa, 1994).

DSM-IV Diagnostic Criteria - Spanish Version (Stinchfield, 2003; see appendix C). The DSM-IV diagnostic criteria questionnaire is a 19-item self-report measure used to assess for pathological gambling according to the diagnostic criteria of the DSM-IV (American Psychiatric Association, 1994). Each criterion has two items except Criterion 4, which has 1 item. The response format is YES/NO and individuals are to indicate presence or absence of diagnostic symptoms over the past year. If either of the items in a criterion is endorsed then the criterion is considered to be present. A score of 5 or greater is indicative of probable pathological gambling. A psychometric evaluation of a Spanish version of the DSM-IV diagnostic criteria revealed high internal consistency ($\alpha = .95$) and satisfactory convergent validity (Jiménez-Murcia et al., 2009).

The Gamblers' Beliefs Questionnaire - Spanish Version (GBQ); Steenbergh et al., 2002; see appendix D). The GBQ was originally developed as a 21-item self-report instrument designed to assess gambling-related cognitive distortions. Each item of the GBQ consists of a statement that represents a cognitive distortion commonly held by gamblers (e.g., “those who don’t gamble much don’t understand that gambling success requires dedication and a willingness to invest some money”). Respondents rate their level of agreement with the statement on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) with higher scores indicating higher levels of problematic thinking. Possible scores can range from 20 to 140.

Initial psychometric testing of the measure revealed good internal consistency ($\alpha = .92$) and adequate test-retest reliability ($r = .77$) in a diverse sample of gamblers. Problem and pathological gamblers reported more cognitive distortions than non-problem gamblers. Additionally, distorted thinking for problem and pathological gamblers was positively correlated with duration of gambling sessions. Factor analytic data revealed a two-factor structure for the GBQ: Luck/Perseverance and Illusion of Control (Steenberg et al., 2002). Recent investigations have provided further convergent validity support for the GBQ (MacKillop, Anderson, Castelda, Mattson, & Donovanick, 2006a & 2006b; Mitrovic & Brown, 2009; Myrseth et al., 2010).

A revised 20-item version of the GBQ was used for this study. Item 11 of the 21-item version (“even though I may be losing with my gambling strategy or plan, I must maintain that strategy or plan because I know it will eventually come through for me”) was removed due to redundancy with item 21 (“I should keep the same bet even when it hasn’t come up lately because it is bound to win”). Item 20 of the 21-item version

(“when I lose at gambling, my losses are not as bad if I don’t tell my loved ones”) was removed because it was not specific to gambling. The item (“I am luckier than most people”) was added to the final 20-item version to further assess beliefs about luck.

Gambling Self-Efficacy Questionnaire - Spanish Version (GSEQ; May et al., 2003; See appendix E). The GSEQ is a 16-item self-report questionnaire used to assess an individual’s perceived self-efficacy to control gambling behavior in a variety of potential high-risk gambling situations. Each item on the GSEQ is preceded with the statement: *I would be able to control my gambling.* The respondent is instructed to imagine the situation in which individuals have trouble controlling their gambling. The respondent is asked to rate their perceived confidence to control their gambling when presented within each situation. The 6-point scale ranges from 0% (Not at All Confident) to 100% (Very Confident) in increments of 20% with higher scores indicating greater confidence to control gambling behavior. Scores can range from 0 to 100.

Initial psychometric testing confirmed high internal consistency ($\alpha = .96$) and high test-retest reliability ($r = .86$) in a diverse sample of gamblers. Problem and pathological gamblers reported significantly lower perceived self-efficacy to control their gambling when presented with high-risk gambling situations as compared to non-problem gamblers. Additionally, those who scored lower on the GSEQ reported betting more money when gambling, losing more money from gambling, and gambling more frequently. Factor analysis supported a unitary factor structure for the GSEQ (May et al., 2003). Recent research has provided further convergent validity support for the GSEQ (Kaur et al., 2006; Martin et al., 2010; Weinstock et al., 2009).

Short Acculturation Scale for Hispanics - Spanish Version (SASH; Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987; See appendix F). This 12-item self-report measure was developed to assess levels of linguistic and social acculturation of Hispanics living in the U.S. Eight items assess linguistic acculturation by asking preference for Spanish as compared to English (e.g., “in which languages do you usually think?”). Responses are scored on a 5-point scale ranging from 1 (Only Spanish) to 5 (Only English) with higher scores indicating a stronger preference for English. Items 9-12 assess social acculturation by asking preference for Hispanic group interaction as compared to Caucasian interaction (e.g., “your close friends are...?”) Responses are reverse scored on a 5-point scale ranging from 1 (All Latinos/Hispanics) to 5 (All Caucasians) with higher scores suggesting a stronger preference for interaction with Caucasians. The responses provided by each respondent can be averaged across items (range of scores is 1 through 5). A cut off score of 2.99 is suggested to differentiate the less acculturated respondents (average score between 1 and 2.99) and the more acculturated respondents (average score above 2.99). The measure has demonstrated good internal consistency ($\alpha = .92$) and convergent validity (Marin et al., 1987).

Procedure

The study was approved by the University of Memphis Institutional Review Board. Potential participants who expressed interest and met the eligibility criteria for the study were provided with the informed consent form, written in Spanish. Those who provided written consent to participate were given the questionnaire packet. The questionnaire packet consisted of Spanish versions of the demographics and gambling history questionnaire, SOGS, DSM-IV diagnostic criteria, GBQ, GSEQ, and SASH,

respectively. Upon completion of the questionnaire packet, participants were provided with a debriefing form in Spanish, which described the objectives of the study and contact information for problem gambling assistance.

RESULTS

Missing Data

One participant failed to answer any items on the DSM-IV criteria, 3 participants failed to answer any items on the GBQ, 27 failed to answer any items on the GSEQ, and 2 participants failed to answer any items on the SASH. A large majority (77.8%, $n = 21$) of those who didn't respond on the GSEQ were non-gamblers. Data were removed for the DSM-IV criteria ($n = 12$) and SOGS ($n = 33$) for cases in which past-year gambling classification (based on the measure's criteria) could not be determined from the reported data. Data were removed for the GBQ ($n = 6$), GSEQ ($n = 5$), and/or SASH ($n = 5$) for individuals missing more than 20% of data (Downey & King, 1998). Missing data for the GBQ, GSEQ, and SASH were uncommon (all measures missing <1% of data), and to estimate the missing data items for the GBQ, GSEQ, and SASH, an individual's mean item score was calculated from the completed items and substituted for the missing item (Downey & King, 1988). After completion of the missing data procedures, data for the DSM-IV criteria ($n = 206$), SOGS ($n = 186$), GBQ ($n = 210$), GSEQ ($n = 187$), and SASH ($n = 212$) were used for psychometric analyses.

Gambling Participation and Activities

Approximately half (50.7%, $n = 111$) of the entire sample reported gambling during the past year. A higher proportion of males (55.8%, $n = 58$) reported gambling than females (46.1%, $n = 53$). Participants engaged in a variety of gambling activities,

including the lottery (29.7%, n = 65), casino (23.7%, n = 52), slot machines (22.8%, n = 50), sports (20.5%, n = 45), cards (19.6%, n = 43), games of skill (15.5%, n = 34), bingo (10%, n = 22), animal races or fights (5.9%, n = 13) and the stock market (3.6%, n = 7). Of those who gambled, 77.4% (n = 86) reported engaging in multiple forms of gambling.

Logistic regressions were conducted to examine associations between past-year gambling participation and demographic variables (age, gender, marital status, education level, year entered to the U.S. to live, acculturation level according to the SASH and whether or not they sent money to other countries). Logistic regression analyses revealed that acculturation was associated with reports of past-year gambling. Specifically, the odds of past-year gambling participation were higher among more acculturated individuals than less acculturated individuals [2.51, 95% CI = (1.01, 6.24)].

Chi-square tests were used to examine bivariate associations among types of gambling activities and demographic variables. Results revealed that a greater proportion of the more acculturated individuals than less acculturated engaged in sports (38.2% vs. 18.4%, respectively, $\chi^2(1, N = 208) = 6.61, p < .05$) lottery (50% vs. 27.2%, $\chi^2(1, N = 212) = 6.94, p < .05$), and bingo (23.5% vs. 8.2%, $p < .05$, Fisher's Exact Test). Logistic regression and chi-square analyses showed that age, gender, marital status, education level, year entered the U.S. to live, and whether or not they sent money to family and friends in other countries were not significantly associated with past-year gambling participation or types of gambling activities engaged in.

Participants were classified by the SOGS criteria as non-gamblers or non-problem gamblers (n = 156; 83.9%), problem gamblers (n = 14; 7.5%), and pathological gamblers (n = 16; 8.6%). In addition, participants were classified non-pathological gamblers (n =

191; 92.7%) and pathological gamblers (n = 15; 7.3%) according to the DSM-IV criteria. None of the participants reported ever receiving treatment for a gambling problem, and 32 participants (14.6% of the entire sample) reported that they typically drink alcohol when they gamble. A majority of the sample (51.6%, n = 113) reported that they knew a family member, friend, and/or someone else important to them with a gambling problem.

Chi-square analyses were also conducted to examine associations between problem gambling status according to the DSM and SOGS and demographic variables (age, gender, marital status, education level, year entered the U.S. to live, acculturation level according to the SASH, and whether or not they sent money to other countries). No significant differences were found in the proportion of non-problem, problem, and pathological gamblers across the different categories of demographic characteristics.

Gamblers' Beliefs Questionnaire

Internal Consistency. The internal consistency of the GBQ was estimated using *coefficient alpha* (Cronbach, 1951) and suggested high internal consistency ($\alpha = .95$).

Factor Analysis. Principal axis factoring was performed to explore the factor structure of the GBQ. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.95) and Bartlett's Test of Sphericity ($X^2 = 3444.86$; $df = 190$, $p < .001$) indicated that the correlation matrix was appropriate for such an analysis. Three factors with eigenvalues greater than 1.0 were extracted from the matrix, but the scree plot suggested that one or two factors should be retained. Parallel analysis was used to determine the appropriate number of factors to retain (Horn, 1965; Zwick & Velicer, 1986). One thousand random data sets for 210 participants and 20 variables were generated. The first factor yielded an eigenvalue of 10.95 which exceeded the eigenvalue (1.58) of the randomly generated data

sets. The eigenvalue of the second factor (1.44) was nearly equivalent to the value of the randomly generated data (1.48), and was retained. The eigenvalue for the third factor (1.01) failed to exceed the value of the randomly generated data (1.40), and was not retained. Therefore, the first two factors were retained, which accounted for 62.01% of the variance. The two factors were highly correlated ($r = .71$), and oblimin rotation was used to increase the interpretability of the factors.

The factor pattern matrix was similar to that found in the initial validation study (Steenbergh et al., 2002). All items exceeded factor loadings of .40, except item 2 (“I am luckier than most people”). Twelve items loaded most heavily on the first factor. The first factor was comprised of items that shared a common theme of an overestimation of chances about winning (Luck/Perseverance; Steenbergh et al., 2002). In contrast to the initial validation, item 19 (“I have more skills and knowledge related to gambling than most people who gamble”) loaded more heavily on the Luck/Perseverance factor. It may be that individuals who believe they have more skills and knowledge related to gambling overestimate their chances of winning. The coefficient alpha for the Luck/Perseverance factor was .96.

Eight items loaded most heavily on the second factor. The second factor included items that shared a common theme in the belief that one’s behavior influences chance determined games (Illusion of Control; Steenbergh et al., 2002). The Illusion of Control factor demonstrated good internal consistency ($\alpha = .86$). GBQ factor loadings are presented in Table 2.

Table 2

Factor Pattern Matrix for GBQ Items

<i>Item Number</i>	<i>Factor 1</i>	<i>Factor 2</i>
1	-.03	.46
2	.15	.25
3	.25	.56
4	.05	.68
5	.46	.31
6	.11	.75
7	.48	.39
8	-.06	.54
9	.08	.81
10	.30	.62
11	.67	.24
12	.70	.10
13	.82	.07
14	.42	.35
15	.79	-.06
16	.65	.24
17	.82	-.01
18	.96	.10
19	.77	.11
20	.99	-.15

Validity. Convergent validity was assessed by examining the relationships between GBQ scores and measures of problem gambling. Pearson correlation analyses revealed significant relationships between the GBQ and the SOGS ($r = .33, p < .01$) and the DSM-IV criteria ($r = .33, p < .01$). To assess construct validity we examined the extent to

which non-problem, problem, and pathological gamblers scored differently on the GBQ. The SOGS and the DSM-IV criteria both provided indices of past-year problem gambling severity. An ANOVA revealed significant differences in GBQ scores among non-problem ($M = 49.7, SD = 25.87$), problem ($M = 66.7, SD = 31.86$) and pathological gamblers ($M = 76.9, SD = 21.21$), $F(2, 175) = 8.97, p < .001$. Follow-up contrasts revealed that pathological gamblers scored significantly higher on the GBQ than non-problem gamblers, $t(163) = 3.83, p < .001, d = 1.3$. Problem gamblers also scored significantly higher on the GBQ than non-problem gamblers, $t(162) = 2.23, p < .05, d = .69$. Pathological gamblers scored higher than problem gamblers on the GBQ, but the difference was not significant, $t(25) = .992, p = .33, d = .38$. The limited samples of problem and pathological gamblers and low effect size yielded a power coefficient of .16 (Cohen, 1988). A second ANOVA revealed that pathological gamblers identified on DSM-IV criteria ($M = 81.5, SD = 25.39$) scored significantly higher on the GBQ than non-pathological gamblers ($M = 51.6, SD = 25.42$), $F(1, 195) = 15.56, p < .001, d = 1.2$.

Acculturation. A Pearson Correlation analysis between GBQ scores SASH scores demonstrated a non-significant relationship ($r = .06, p = .42$). An ANOVA revealed no significant difference in GBQ scores between SASH classified less acculturated ($M = 57.38, SD = 24.67$) and more acculturated ($M = 51.79, SD = 25.86$) participants, $F(1, 203) = 1.35, p = .277, d = .22$. Additionally, an ANOVA revealed non-significant differences in GBQ scores among those who reported entering to live in the U.S. before the year 2000 ($M = 50.0, SD = 26.98$) and after the year 2000 ($M = 54.72, SD = 24.96$), $F(1, 168) = 1.406, p = .237, d = .18$. It is important to note that the relatively small sample

size of the more acculturated individuals and small effects limited the power of these analyses.

Gambling Self-Efficacy Questionnaire

Internal Consistency. According to the *coefficient alpha* estimation (Cronbach, 1951), the GSEQ demonstrated high internal consistency ($\alpha = .99$).

Factor Analysis. Principal axis factoring was performed to explore the factor structure of the GSEQ. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.95) and Bartlett's Test of Sphericity ($X^2 = 5324.7$; $df = 120$, $p < .001$) indicated that the correlation matrix was appropriate for such an analysis. One factor with an eigenvalue (13.57) greater than 1.0 was extracted from the matrix. Examination of the scree plot also suggested that one factor should be retained. The retained factor accounted for 84.8% of the variance. All items yielded factor loadings above .90. GSEQ factor loadings are presented in Table 3.

Table 3

Factor Pattern Matrix for GSEQ Items

<i>Item Number</i>	<i>Factor Loading</i>
1	.91
2	.99
3	.99
4	.99
5	.94
6	.97
7	.99
8	.99

Table 3 (continued)

<i>Item Number</i>	<i>Factor Loading</i>
9	.99
10	.98
11	.97
12	.99
13	.96
14	.98
15	.98
16	.97

Validity. Convergent validity of the GSEQ was assessed by examining the relationships between GSEQ scores and measures of problem gambling. A Pearson correlation analyses revealed a non-significant relationship between the GSEQ and the SOGS ($r = -.13, p = .10$) and a non-significant relationship between the GSEQ and the DSM-IV criteria ($r = -.14, p = .07$). Construct validity was assessed by examining the degree to which non-problem, problem, and pathological gamblers scored differently on the GSEQ. Although trending in the expected direction, an ANOVA revealed non-significant differences between SOGS classified non-problem ($M = 71.42, SD = 39.1$), problem ($M = 66.0, SD = 20.38$), and pathological gamblers ($M = 58.05, SD = 19.7$), $F(2, 157) = 1.03, p = .358$. According to the DSM-IV criteria, pathological gamblers ($M = 57.29, SD = 18.16$) scored lower on the GSEQ than non-pathological gamblers ($M = 73.68, SD = 36.6$) gamblers, but the difference only approached significance, $F(1, 177) = 2.93, p = .089, d = .46$. However, the limited sample size of pathological gamblers and medium effect size restricted the power of this analysis (.40; Cohen, 1988). It is

important to note that a number of non-problem gamblers identified by the SOGS ($n = 16$) and DSM-IV criteria ($n = 17$) reported 0% confidence to control their gambling on all of the high-risk situations on the GSEQ.

Acculturation. A Pearson correlation analysis among the GSEQ and SASH revealed a non-significant relationship ($r = .07, p = .343$), and an ANOVA showed no significant difference in GSEQ scores between the less acculturated ($M = 71.04, SD = 36.66$) and more acculturated ($M = 80.52, SD = 28.24$) participants, $F(1, 183) = 1.95, p = .164, d = .27$. In addition, an ANOVA revealed non-significant differences in GSEQ scores between those who reported entering to live in the U.S. before the year 2000 ($M = 78.83, SD = 34.26$) and after 2000 ($M = 68.94, SD = 37.39$), $F(1, 149) = 1.39, p = .24, d = .19$. The relatively small sample size of more acculturated individuals and small effect sizes also reduced the power of these analyses.

DISCUSSION

Hispanics comprise the fastest growing minority population in the U.S.; unfortunately, there remains a dearth of resources for Hispanics with gambling-related problems. This study provided initial supportive evidence for Spanish versions of a measure of gambling-related cognitive distortions and a measure of gambling-related self-efficacy. The reliabilities and validities of the measures were assessed, the factor structures were explored, and the relations between scores on the measures and acculturation were examined. Gambling participation information was also obtained.

The Spanish version of the GBQ showed high internal consistency and is considered suitable for use in research and clinical settings (Nunnally & Bernstein, 1994). The high level of internal consistency was similar to that of the English version of the

GBQ (.95; Mackillop et al., 2006; 92; Steenbergh et al., 2002). Exploratory factor analysis revealed a two factor structure for the Spanish version of the GBQ and internal consistencies were high for the fullscale GBQ and the Luck/Perseverance factor, and slightly lower for the the Illusion of Control factor. This is similar to the initial psychometric evaluation of the English language version (Steenbergh et al., 2002). One item loaded differently than expected based on the initial evaluation, but the two factors overwhelmingly retained their specific themes of Luck/Perseverance and Illusion of Control. The two factors were also found to be highly correlated. It is possible that illusion of control beliefs facilitate overestimations of winning. This investigation provides the first empirical data supporting a two-factor conceptualization of gambling-related cognitive distortions with a Hispanic sample. The GBQ was designed for use in research and clinical settings; therefore, an evaluation of of the measure with a clinical sample of problem gamblers is warranted.

As expected, SOGS identified problem and pathological gamblers scored significantly higher on the GBQ than non-problem gamblers. Likewise, pathological gamblers classified by the DSM-IV criteria scored significantly higher on the GBQ than non-pathological gamblers. These findings provide further evidence that gambling-related cognitive distortions are associated with the maintenance of problem gambling (Ladouceur, 2004; Myrseth et al., 2010; Steenbergh et al., 2002). Pathological gamblers scored higher on the GBQ than problem gamblers, but the difference was not significant. Steenbergh et al. (2002) reported a similar result and suggested several possible explanations: (1) there is no true difference in cognitive distortions between pathological and problem gamblers; (2) the GBQ does not fully assess the domains of cognitive

distortions and there is in fact a difference between the groups; (3) measurement error in the SOGS; or (4) true differences between these groups may not be due to the endorsement of cognitive distortions. It is important to note that the limited number of problem and pathological gamblers and moderate effect size resulted in an 84% chance that a significant difference between these groups could be missed if a difference existed (Cohen, 1988).

A non-significant relationship was found between the GBQ and a measure of acculturation (SASH). Moreover, no significant difference in GBQ scores was found among less acculturated and more acculturated participants. Additionally, those who entered the U.S. before and after the year 2000 did not significantly differ on their GBQ scores. These findings suggest that in this sample acculturation level is not related to gambling-related cognitive distortions. However, the weak relationship between cognitive distortions and acculturation should be interpreted with caution due to the limited power of these analyses. To our knowledge this is the first empirical study examining the relationship between Hispanic acculturation and gambling-related cognitive distortions. Further research with larger samples and other measures of acculturation is needed to better understand the relationship among these variables.

The Spanish version of the GSEQ demonstrated a high level of internal consistency and according to Nunnally and Bernstein (1994) is adequate for use in clinical and research settings. The internal consistency was similar to that of the English GSEQ (.96; May et al., 2003), another measure of gambling self-efficacy (.98; Casey, Oei, Melville, Bourke, & Newcombe, 2007), and the Situational Confidence Questionnaire-39 for problem drinking (.98; Annis & Graham, 1998). Factor analysis

yielded a unitary factor structure similar to that of the initial psychometric evaluation (May et al., 2003). These findings indicate the presence of a single factor comprised of heterogeneous high-risk categories: unpleasant emotions, physical discomfort, pleasant emotions, testing personal control, urges and temptations, conflict with others, and pleasant times with others. The high level of internal consistency and single factor structure may warrant reducing the number of items; however, the unitary factor structure was not unexpected given that all items were developed to assess a general underlying construct of gambling self-efficacy.

Unexpectedly, GSEQ scores correlated weakly with other measures of problem gambling. In addition, non-problem and problem gamblers as classified by the SOGS and DSM-IV differed on GSEQ scores in the expected direction but did not yield significant differences at the $p < .05$ level. The limited number of pathological gamblers and medium effect size resulted in a 60% chance of missing a significant difference in GBQ scores between DSM-IV criteria identified non-pathological and pathological gamblers, if one existed (Cohen, 1988). The non-significant differences among these groups could also be explained by the higher than expected number of non-problem gamblers who reported low self-efficacy to control their gambling behavior. These non-problem gamblers may have low perceived gambling self-efficacy due to a history of difficulty controlling their gambling, or their low self-efficacy could reflect untested cognitions about their ability to control their gambling. Hispanic-Americans have reported lower self-efficacy to abstain from smoking when presented with smoking-related high risk situations relative to other racial/ethnic groups (Martinez et al., 2010), which may suggest a lower than average perceived self-efficacy to control addictive

behaviors. Several other explanations similar to those suggested for the non-significant difference between problem and pathological gamblers on GBQ scores could also account for these findings: (1) there are no true difference in self-efficacy among these groups; (2) the GSEQ failed to assess other domains of self-efficacy that could potentially differentiate the groups; (3) SOGS and DSM measurement error; and/or (4) true differences between these groups may not be due to the endorsement of self-efficacy. As with the GBQ, the GSEQ was designed for use in research and clinical settings, and needs to be psychometrically evaluated with a clinical sample of problem gamblers.

A non-significant relationship was found between the GSEQ and a measure of acculturation (SASH). No significant difference in GSEQ scores was found between SASH-identified less acculturated and more acculturated participants, as well as between those who entered the U.S. to live before and after the year 2000. However, these findings should be interpreted with caution due to the small sample of less acculturated individuals and small effects. To our knowledge, these results provide the first empirical information regarding the relationship between Hispanic acculturation and gambling self-efficacy.

Those who reported higher levels of social and linguistic acculturation/preference were more likely to have gambled during the past year than less acculturated participants. In addition, larger proportions of more acculturated participants engaged in sports, lottery and bingo, than less acculturated participants. Momper et al. (2009) found a similar association in which the odds of lifetime gambling participation were higher among more acculturated Mexican immigrants than less acculturated Mexican immigrants. Conversely, we did not find a significant difference in past-year gambling participation

between those who entered the U.S. to live before and after the year 2000. This is surprising because acculturation level is likely to reflect the length of time spent in the U.S. The relationship between acculturation/preference and gambling behavior may have been influenced by increased financial stability (Momper et al., 2009). However, in our sample whether or not someone sent money to family and/or friends in other countries was not associated with past-year gambling participation. Greater acculturation into this country may increase the risk of gambling-related problems; therefore, it is important to better understand the influence of acculturative factors on gambling behavior.

Approximately half (50.7%) of participants reported gambling in the past year, a rate similar for lifetime gambling participation among undocumented Mexican immigrants in NYC (53.8%; Momper et al. 2009). National estimates have found higher rates of past-year Hispanic gambling participation (83%; Welte et al., 2002) and general population gambling participation (63% - 82%; Gerstein et al., 1999; Welte et al., 2002). A higher proportion of males (55.8%) than females (46.1%) reported gambling over the past year which was similar to the gender difference in gambling participation found in the general population (66% v. 59.3%, respectively; Potenza et al., 2006). However, Momper et al. (2009) found a greater gender contrast among Mexican immigrants in NYC in lifetime gambling participation (78% v. 22%, respectively). It is possible that disparate cultural norms among samples influenced differences in gambling participation. For example, findings from this study may reflect gambling behavior of individuals from a wide variety of countries, whereas the Momper et al. (2009) study consisted of individuals from Mexico. However, it remains uncertain how sample characteristics and time frame (past-year vs. lifetime) influenced these differences in gambling participation.

The rates of problem and pathological gambling among the sample in this study were higher than general population estimates (e.g., Gerstein et al., 1999; Welte et al., 2002). In addition, more than half of the sample reported that they knew a family member, friend, and/or someone else important to them with a gambling problem. Previous investigations have also found higher than average problem and pathological gambling rates for minorities (Welte et al., 2004) and Hispanics in particular (Wallisch, 1996; Welte et al., 2002). Although there were high rates of problem and pathological gambling in this sample, none of the participants reported that they had ever received treatment for a gambling problem. Low treatment utilization among Hispanics has been found for gambling and other addictive behaviors (Canino, Anthony, Freeman, Shrout, & Rubio-Stipec, 1993; Cuadrado, 1999; Schmidt, Greenfield, & Bond, 2007). Several treatment barriers have been reported for this group, such as logistical problems and payment issues, cultural barriers including language concerns, and stigma (Schmidt et al., 2007). Cuadrado (1999) suggested that traditional Hispanic cultural norms could serve as a treatment barrier. For example, excessive drinking and gambling among men is permissible and less likely to be labeled as problematic in some Hispanic cultures where the norm of *machismo* is relevant (Cuadrado, 1999). On the other hand, Hispanic females may be reluctant to discuss a gambling problem for fear that such behavior would violate the tenets of *marianismo*, the expectation for Hispanic women to be submissive/passive, selfless, and family-centered, and would likely be met with negative reactions from the community (Cuadrado, 1999). It could be that participants were unaware of available problem gambling services in the community. This would indicate the need for increased Hispanic appropriate problem gambling awareness strategies.

This investigation was the first to develop and evaluate Spanish translations of a measure of gambling-related cognitive distortions and a measure of gambling-related self-efficacy. This information may help to address the dearth of assessment tools available for clinicians and researchers who work with Spanish-speaking gamblers. However, several limitations of this study should be considered. First, it may be possible that there are gambling-related cognitive domains not included in the current versions of the measures. For example, a large majority of the Hispanic population is affiliated with a religion (94%; Espinosa, Elizondo, & Miranda, 2003). Religious beliefs could influence gambling behavior and are not accounted for in the GBQ or GSEQ. Second, the sample only represented Hispanics residing in the Memphis area and may not be representative of the diverse U.S. Hispanic population. Replications of this study with larger samples are required to support the generalization of these findings. Further research should also be conducted with clinical samples in order to support the use of the GBQ and GSEQ in treatment settings. Finally, the temporal stability of the measures should be assessed to provide further reliability evidence.

Given the rapidly increasing U.S. Hispanic population, there is a need for resources for Spanish-speakers who need assistance with gambling problems. The GBQ and GSEQ were developed to assist in case conceptualization, treatment planning, and outcome for cognitive-behavioral based treatments for problem gambling, and this study provides initial support for the Spanish versions of the GBQ and GSEQ. The results are promising but further examination of the measures in a variety of settings is needed.

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Appendix A Demographics and Gambling History Questionnaire

INSTRUCCIONES: Por favor, conteste las preguntas tan honestamente como sea posible. Sus respuestas serán confidenciales. Para las **13 preguntas siguientes**, por favor marque el casillero con la respuesta que mejor lo describe o complete el espacio en blanco cuando sea necesario.

1.	¿Cuál es su sexo?	<input type="checkbox"/> Masculino <input type="checkbox"/> Femenino
2.	¿Cuál es su edad?	_____ años
3.	¿Escriba cuál es el grupo étnico que mejor lo describe:	_____
4.	¿Cuál es el máximo nivel de educación formal que usted ha alcanzado?	<input type="checkbox"/> Primario <input type="checkbox"/> Secundario <input type="checkbox"/> Preparatoria / Bachillerato / Educación media superior <input type="checkbox"/> Licenciatura / Educación superior <input type="checkbox"/> Maestría <input type="checkbox"/> Doctorado <input type="checkbox"/> Otro: _____
5.	¿Cuál es su estado civil?	<input type="checkbox"/> Soltero/a <input type="checkbox"/> <input type="checkbox"/> Casado/a <input type="checkbox"/> Separado/a <input type="checkbox"/> <input type="checkbox"/> Divorciado/a <input type="checkbox"/> Viudo/a
6.	¿Cuál es su ingreso mensual? (de trabajo, de su familia, o de otras fuentes):	\$ _____
7.	¿Cuál es su estado residencial?	_____
8.	¿Si no nació en los Estados Unidos, en qué año usted llegó a Los Estados Unidos para vivir?	_____
9.	¿Usted envía dinero a parientes o amigos en otros países?	<input type="checkbox"/> Sí <input type="checkbox"/> No
10.	¿Cuántas veces usted ha participado en juegos de apuestas durante el último año ?	_____

<p>11.</p>	<p>Durante el último año:</p> <p>¿Cuál fue la más grande apuesta que usted ha realizado? (Por ejemplo, si su más grande apuesta fue \$250 en una carrera de caballos o en una jugada de ruleta, entonces usted debería escribir \$250).</p> <p>Durante el último año, ¿cuánto dinero usted ganó o perdió de los juegos de apuestas?</p>	<p>\$ _____</p> <p>\$ _____</p>
<p>12.</p>	<p>¿Bebe alcohol usualmente cuando apuesta?</p>	<p><input type="checkbox"/> Sí <input type="checkbox"/> No</p>
<p>13.</p>	<p>¿Ha recibido tratamiento por un problema con sus apuestas?</p>	<p><input type="checkbox"/> Sí <input type="checkbox"/> No</p>

Appendix B

DSM – IV Diagnostic Criteria – Spanish Version

INSTRUCCIONES: Las siguientes **10 preguntas** se refieren a su conducta de juego en el **último año**. Lea cada pregunta con cuidado y luego responda "Sí" o "No", marcando el casillero correspondiente.

<i>En el último año:</i>		<i>Sí</i>	<i>No</i>
1	a.- ¿Ha pasado mucho tiempo pensando en experiencias pasadas de juego o planeando las siguientes jugadas?		
	b.- ¿Piensa frecuentemente en la forma de conseguir dinero para jugar?		
2	a.- ¿Ha tenido momentos en los que ha necesitado jugar más para obtener el grado de excitación deseado?		
	b.- ¿Ha tenido que jugar con mayores cantidades de dinero o apostar más para obtener el grado de excitación deseado?		
3	a.- ¿Ha intentado disminuir o controlar el juego repetidas veces en el pasado y le ha resultado difícil?		
	b.- ¿Ha intentado interrumpir su conducta de juego repetidas veces en el pasado y no lo ha conseguido?		
4	a.- Después de intentar interrumpir o detener el juego, ¿se ha sentido inquieto o irritable?		
5	a.- ¿Siente que el jugar es una forma de escapar de sus problemas?		
	b.- ¿Percibe que el juego alivia emociones desagradables como la ansiedad y la depresión?		
6	a.- Cuando pierde dinero en un día ¿generalmente vuelve para recuperar lo perdido?		
	b.- ¿Cuando ha tenido una importante deuda por el juego, ha continuado jugando con la esperanza de recuperar su dinero?		
7	a.- ¿Ha mentido con mucha frecuencia a los miembros de su familia, amigos, compañeros de trabajo o profesores acerca de su grado de implicación o de sus deudas de juego?		
	b.- ¿Ha ocultado o intentado ocultar su conducta de juego a otras personas (p.ej.: miembros de la familia)?		
8	a.- ¿Ha hecho falsificaciones o robado con la finalidad de financiar el juego?		
	b.- ¿Ha cometido algún tipo de acto ilegal como un asalto o acto fraudulento para poder mantener su conducta de juego?		
9	a.- ¿Han habido momentos en los que el juego ha generado problemas en sus relaciones con amigos, familia, compañeros de trabajo o profesores?		
	b.- ¿Ha faltado al trabajo, escuela u otra actividad social o familiar importante debido al juego?		
10	a.- ¿Ha pedido dinero prestado debido a que el juego le ha causado problemas económicos?		
	b.- Cuando se ha sentido desesperado por su situación económica, ¿ha conseguido que otras personas paguen sus deudas de juego?		

Appendix C
South Oaks Gambling Screen (SOGS) – Spanish Version

INSTRUCCIONES: Para las siguientes **16 preguntas**, marque la opción que mejor describa su conducta de juego en **el último año**.

1. Indique en la tabla, por favor, cuál de los siguientes juegos ha practicado usted en **el último año**.

Juegos	Nunca	Menos de una vez por semana	Una vez por semana o más
A. jugar a cartas con dinero de por medio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. apostar en las carreras de caballos o de perros, en las peleas de gallos o de otros animales (en el hipódromo, en la pista, o con un corredor de apuestas)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. apostar en los deportes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. jugar a la lotería, a la quinielas, a la primitiva, a la bono-loto o a los ciegos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. jugar en el casino	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. jugar al bingo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. especular en la bolsa de valores	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. jugar en las máquinas tragamonedas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. practicar cualquier deporte o poner a prueba cualquier habilidad por una apuesta (al boliche, al billar, al golf u otras)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. jugar en alguna forma de apostar todavía no mencionado (indique cuales son, por favor)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. ¿Cuál es la mayor cantidad de dinero que ha gastado en jugar en un solo día? _____
3. Señale quién de las siguientes personas allegadas tiene o ha tenido/a un problema de juego.
- mi padre mi madre un hermano un abuelo
 mi cónyuge o pareja alguno de mis hijos otro familiar
 un amigo o alguien importante para mí

4. Cuando usted juega dinero, ¿con qué frecuencia vuelve otra vez a jugar para recuperar lo perdido?
- Nunca La mayoría de las veces que pierdo
- Algunas veces, pero menos de la mitad Siempre que pierdo
5. ¿Ha afirmado usted alguna vez haber ganado dinero en el juego cuando en realidad había perdido?
- Nunca Si, pero menos de la mitad de las veces que he perdido La mayoría de las veces
6. ¿Cree usted que tiene o ha tenido alguna vez problemas con el juego?
- No Ahora no, pero en el pasado sí Ahora sí

	Sí	No
7. ¿Ha jugado alguna vez más dinero de lo que tenía pensado?	<input type="checkbox"/>	<input type="checkbox"/>
8. ¿Le ha criticado la gente por jugar dinero o le ha dicho alguien que tenía un problema de juego, a pesar de que usted cree que no es cierto?	<input type="checkbox"/>	<input type="checkbox"/>
9. ¿Se ha sentido alguna vez culpable por jugar o por lo que le ocurre cuando juega?	<input type="checkbox"/>	<input type="checkbox"/>
10. ¿Ha intentado alguna vez dejar de jugar y no ha sido capaz de ello?	<input type="checkbox"/>	<input type="checkbox"/>
11. ¿Ha ocultado alguna vez a su pareja, a sus hijos o a otros seres queridos billetes de lotería, fichas de apuestas, dinero obtenido en el juego u otros signos de juego?	<input type="checkbox"/>	<input type="checkbox"/>
12. ¿Ha discutido alguna vez con las personas con que convive sobre la forma de administrar el dinero?	<input type="checkbox"/>	<input type="checkbox"/>
14. (Si ha respondido sí a la pregunta anterior) ¿Se han centrado alguna vez las discusiones de dinero sobre el juego?	<input type="checkbox"/>	<input type="checkbox"/>
15. ¿Ha pedido en alguna ocasión dinero prestado a alguien y no se lo ha devuelto a causa del juego?	<input type="checkbox"/>	<input type="checkbox"/>
15. ¿Ha perdido alguna vez tiempo de trabajo o de clase debido al juego?	<input type="checkbox"/>	<input type="checkbox"/>

16. Si ha pedido prestado dinero para jugar o pagar deudas, ¿a quién se lo a perdido o de dónde lo ha obtenido? (ponga una X en las respuestas que sean ciertas en su caso)

	Sí	No
A. del dinero de casa	<input type="checkbox"/>	<input type="checkbox"/>
B. a mi pareja	<input type="checkbox"/>	<input type="checkbox"/>
C. a otros familiares	<input type="checkbox"/>	<input type="checkbox"/>
D. de bancos y cajas de ahorro	<input type="checkbox"/>	<input type="checkbox"/>
E. de tarjetas de crédito	<input type="checkbox"/>	<input type="checkbox"/>
F. de prestamistas	<input type="checkbox"/>	<input type="checkbox"/>
G. de la venta de propiedades personales o familiares	<input type="checkbox"/>	<input type="checkbox"/>
H. de la firma de cheques falsos o de extender cheques sin fondos	<input type="checkbox"/>	<input type="checkbox"/>
I. de una cuenta de crédito en el mismo casino	<input type="checkbox"/>	<input type="checkbox"/>

Appendix D Gamblers' Beliefs Questionnaire (GBQ) – Spanish Version

INSTRUCCIONES: Lea cada una de las 20 siguientes afirmaciones detenidamente. Valore hasta que punto está de acuerdo o en desacuerdo con cada afirmación dibujando un círculo alrededor del número correspondiente.

1. Pienso que apostar es un desafío.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

2. Soy más afortunado que la mayoría de la gente.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

3. Mi conocimiento y habilidad para apostar contribuye a la probabilidad de que ganaré dinero.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

4. Mis elecciones o acciones afectan a la partida en que estoy apostando.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

5. Si estoy apostando y perdiendo, debo continuar porque no quiero perder una victoria.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

6. Debo mantener en mente las anteriores apuestas ganadoras para prever cómo debo apostar en el futuro.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

7. Cuando estoy apostando, las ocasiones en que casi gano o “perdí por un pelo” me recuerdan que si continúo apostando al final ganaré.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

8. Apostar es más que la suerte.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

9. Mis victorias en las apuestas demuestran que tengo la habilidad y el conocimiento para apostar.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

10. Tengo una técnica “afortunada” que empleo cuando apuesto.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

11. A largo plazo, ganaré más dinero del que perderé apostando.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

12. Hay algunas cosas que hago cuando estoy apostando (por ejemplo, golpear un determinado número de veces, agarrar una moneda de la suerte en mi mano, cruzar los dedos, etc.) lo que aumenta las posibilidades de que gane.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

13. Si pierdo dinero apostando, debo continuar para recuperar la cantidad perdida.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

14. Los que no apuestan demasiado, no entienden que apostar con éxito requiere dedicación y predisposición a invertir algún dinero.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

15. Donde consiga el dinero para apostar no importa ya que ganaré y lo devolveré.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

16. Soy bastante preciso al predecir cuándo una “victoria” acontecerá.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

17. Las apuestas son el mejor camino para experimentar emociones fuertes.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

18. Si continúo apostando, finalmente resultará y ganaré dinero.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

19. Tengo más habilidades y conocimiento sobre las apuestas que la mayoría de la gente que juega.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

20. Debo mantener la misma apuesta aunque no haya ganado últimamente porque está destinada a ganar.

1	2	3	4	5	6	7
Completamente de acuerdo			Neutro			Completamente en desacuerdo

Appendix E Gambling Self-Efficacy Questionnaire (GSEQ) – Spanish Version

INSTRUCCIONES: A continuación hay una lista de **16 situaciones u ocasiones** en las cuales alguna gente experimenta problemas relacionados con el juego. Imagínese a usted mismo como si estuviera **ahora mismo** en cada una de esas situaciones e indique en la escala de abajo que tan confiado/a está en que será capaz de controlar su conducta de apostar.

Por ejemplo: ¿Qué tan confiado/a estaría de que usted podría limitar la cantidad de dinero y de tiempo que va a dedicar a apostar para que ello no le ocasione un problema, si usted se sintiera **confiado/a** y **relajado**?

- Encierre con un círculo **100** si usted está 100% confiado ahora mismo de que usted podría controlar su conducta de apostar
- **80** si usted está 80% confiado que podría controlar su conducta de apostar
- **60** si usted está 60% confiado que podría controlar su conducta de apostar
- **Si está más desconfiado que confiado**, encierre con un círculo **40** para indicar que usted está sólo 40% confiado de que usted podría controlar su conducta de apostar
- **20** para 20% confiado de que usted podría controlar su conducta de apostar
- **0** si **no tiene ninguna confianza** en estas situaciones para controlar su conducta de apostar

Sería capaz de controlar mis apuestas:

	<i>No confiado/a en absoluto</i>		<i>Muy confiado/a</i>			
1. Si sintiera que me hubiera decepcionado a mí mismo.	0	20	40	60	80	100
2. Si hubiera peleas en casa.	0	20	40	60	80	100
3. Si tuviera problemas para dormir.	0	20	40	60	80	100
4. Si tuviera una disputa con un amigo.	0	20	40	60	80	100
5. Si me sintiera relajado y confiado.	0	20	40	60	80	100
6. Si me estuviera divirtiendo y me quisiera sentir aún mejor.	0	20	40	60	80	100
7. Si hubiera perdido dinero apostando un día y sintiera la urgencia de recuperarlo al día siguiente.	0	20	40	60	80	100
8. Si estuviera en un lugar donde otra gente estuviera apostando.	0	20	40	60	80	100
9. Si me preguntara sobre mi auto control apostando y quisiera ponerlo a prueba.	0	20	40	60	80	100
10. Si estuviera furioso por el modo en que las cosas salen.	0	20	40	60	80	100
11. Si estuviera relajándome con un buen amigo y quisiera	0	20	40	60	80	100

Sería capaz de controlar mis apuestas:

	<i>No confiado/a en absoluto</i>			<i>Muy confiado/a</i>		
12. Como si sintiera un nudo en el estómago.	0	20	40	60	80	100
13. Si saliera con mis amigos y quisiera pasarlo mejor.	0	20	40	60	80	100
14. Si me encontrara con un amigo y él/ella sugiriera en que vayamos a apostar.	0	20	40	60	80	100
15. Si de repente sintiera la urgencia de apostar.	0	20	40	60	80	100
16. Si quisiera ponerme a prueba de que puedo apostar en pocas ocasiones sin perder el control.	0	20	40	60	80	100

Appendix F
Short Acculturation Scale for Hispanics (SASH)

INSTRUCCIONES: Para las siguientes 12 preguntas, por favor dibuje un círculo alrededor de la opción que mejor describe sus opiniones generales y su forma de comportamiento.

Spanish

* 1. Por lo general, qué idioma(s) lee y habla usted?

1	2	3	4	5
:-----:	:-----:	:-----:	:-----:	:-----:
Solo Español	Español mejor que Inglés	Ambos por igual	Inglés mejor que Español	Solo Inglés

* 2.Cuál fué el idioma(s) que habló cuando era niño(a)?.

1	2	3	4	5
:-----:	:-----:	:-----:	:-----:	:-----:
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

* 3. Por lo general, en qué idioma(s) habla en su casa?

1	2	3	4	5
:-----:	:-----:	:-----:	:-----:	:-----:
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

4. Por lo general, en qué idioma(s) piensa?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

5. Por lo general en qué idioma(s) habla con sus amigos(as)?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

6. Por lo general, en qué idioma(s) son los programas de televisión que usted ve?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

7. Por lo general, en qué idioma(s) son los programas de radio que usted escucha?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

8. Por lo general, en qué idioma(s) *prefiere* oír y ver películas, y programas de radio y televisión?

1	2	3	4	5
Solo Español	Más Español que Inglés	Ambos por igual	Más Inglés que Español	Solo Inglés

9. Sus amigos y amigas mas cercanos son:

1	2	3	4	5
_____ Solo Latinos	_____ Más Latinos que Americanos	_____ Casi mitad y mitad	_____ Más Americanos que Latinos	_____ Solo Americanos

10. Usted prefiere ir a reuniones sociales/fiestas en las cuales las personas son:

1	2	3	4	5
_____ Solo Latinas	_____ Más Latinas que Americanas	_____ Casi mitad y mitad	_____ Más Americanas que Latinas	_____ Solo Americanas

11. Las personas que usted visita o que le visitan son:

1	2	3	4	5
_____ Solo Latinas	_____ Más Latinas que Americanas	_____ Casi mitad y mitad	_____ Más Americanas que Latinas	_____ Solo Americanas

12. Si usted pudiera escoger los amigos(as) de sus hijos(as), quisiera que ellos(as) fueran:

1	2	3	4	5
_____ Solo Latinos	_____ Más Latinos que Americanos	_____ Casi mitad y mitad	_____ Más Americanos que Latinos	_____ Solo Americanos

THE UNIVERSITY OF MEMPHIS

Institutional Review Board

To: Walter Winfree
Psychology

From: Chair, Institutional Review Board
for the Protection of Human Subjects

Subject: **Psychometric Properties of Spanish Translation of the
Gamblers' Belief Questionnaire and the Gambling Self-Efficacy
Questionnaire (H11-03)**

Approval Date: August 13, 2010

This is to notify you of the board approval of the above referenced protocol. This project was reviewed in accordance with all applicable statutes and regulations as well as ethical principles.

Approval of this project is given with the following obligations:

49. At the end of one year from the approval date an approved renewal must be in effect to continue the project. If approval is not obtained, the human consent form is no longer valid and accrual of new subjects must stop.
50. When the project is finished or terminated, the attached form must be completed and sent to the board.
51. No change may be made in the approved protocol without board approval, except where necessary to eliminate apparent immediate hazards or threats to subjects. Such changes must be reported promptly to the board to obtain approval.
52. The stamped, approved human subjects consent form must be used. Photocopies of the form may be made.

This approval expires one year from the date above, and must be renewed prior to that date if the study is ongoing.

Approved

Cc: **Dr. A. Myers**