

EFFECTS OF WILLINGNESS, CONSTRAINTS, AND CONSTRAINT NEGOTIATION ON CASINO GAMBLING

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Over the past 30 years casino gambling has expanded from one state to over 20 states. Similarly, in Alberta (Canada), the number of casinos has grown from one in 1980 to 27 in 2011. In spite of this growth, a PsycINFO search using the keyword “casino gambling” identified only 95 studies on this topic published post-1984. Moreover, little of this research appears to have been theoretically driven. For example, when a second search was conducted using “theory of planned behavior” as a keyword, 1,823 studies were identified, of which only two—both unpublished dissertations—involved casino gambling.

According to the theory of planned behavior (TPB; Ajzen, 1991), a person’s behavior is largely dependent on his or her intention to perform that behavior which, in turn, is determined by: (a) the person’s attitudes toward the behavior; (b) the subjective norms he or she believes significant others have concerning the behavior; and (c) his or her perception of whether the behavior can be performed (i.e., perceived behavioral control or PBC). A meta-analysis (Armitage & Connor, 2001) found that intention accounted for 31% of the variance in behavior, with a direct effect from PBC accounting for an additional 2% in some but not all studies.

Although refereed studies of TPB and casino gambling are lacking, this framework has been used to examine other forms of leisure (e.g., Ajzen & Driver, 1991; Courneya, 1995; Hrubes et al., 2001) including non-casino gambling. In terms of the latter, Sheeran and Orbell (1999) found that intention predicted 30% of the variance in lottery play, while Walker et al. (2006) found that intention had a large effect size on the lottery play of British- and Chinese-Canadian males and females. Noteworthy is that PBC had a non-significant effect on the former study’s participants’ behavior and only a small effect on British-Canadian males’ behavior in the latter study.

One reason TPB has become popular is that Ajzen (1991) welcomed the addition of new variables if they were shown to improve upon his original theoretical framework. For example, Gibbons et al. (1998) differentiated between behavioral intention and behavioral willingness (i.e., not intended or premeditated acts but rather those that occur because of facilitative circumstances) and found that both variables improved future predictions of certain behaviors. Additionally, in the case of gambling, Walker et al. (2006) suggested that the inclusion of leisure constraints—i.e., factors “that limit the preferences and/or inhibit or prohibit participation and enjoyment” (Jackson, 2000, p. 62)—could also help explain behavior beyond intention. Based on the above, the purpose of this study was to examine the effects of PBC, behavioral intention, behavioral willingness, leisure constraint, and leisure constraint negotiation, on casino gambling.

Method

Participants completed a questionnaire that asked them to report, based on TPB, their attitudes and subjective norms (not discussed further herein); and PBC (two items, including: “How much personal control do you feel you would have over gambling at a casino in the next six months: absolutely no control, slight control, moderate control, a great deal of control, complete control.”). Behavioral intention to bet or spend money on casino games in the next six months was measured first with a “yes/ no” question followed by, if affirmative, a series of questions regarding on which specific activities (i.e., card games, table games, slot machines, video lottery terminals, other) and how often for each. Participants were re-contacted six months later and reported their actual casino gambling behavior during the intervening time period. For those who reported engaging in gambling, also measured were: (a) which specific activities and the number

of times for each; (b) the degree (i.e., never, sometimes, often, very often) to which they felt constrained (eight items: e.g., “I didn’t have enough time.”; items based on Wilhelm Stanis, Schneider, & Anderson, 2009); (c) the strategies they used to negotiate these constraints (eight items, e.g., “I tried to plan ahead so I could go casino gambling”; items based on Wilhelm Stanis, Schneider, & Anderson, 2009); and (d) the degree (i.e., never, sometimes, often, very often) to which they had gambled willingly but unintentionally (based on Gibbons et al., 1998).

After the initial questionnaire was pre-tested, a random sample of adults living in a major Alberta city was generated and then computer-assisted telephone interviewing commenced. Nineteen hundred and eighty five different telephone numbers were called, with 401 individuals agreeing to participate in the study: 81 male casino gamblers (20.2%), 101 male non-casino gamblers (25.2%), 119 female casino gamblers (29.7%), and 100 female non-casino gamblers (24.9%). The low response rate (20.2%) may be attributable to sensitivity concerning the topic and decreased public interest in telephone surveys, although these issues were likely somewhat assuaged by each participant being remunerated \$10 Canadian.

Results

Of the 401 participants who completed the initial questionnaire 332 (82.8%) completed the follow-up. Those who indicated they did not casino gamble had their constraint and constraint negotiation scores recoded to reflect this. On average, participants reported they intended casino gambling 2.92 times ($SD=9.01$) in the next six months, but they only actually did so 2.26 times ($SD=6.46$) during this time period. PBC was reported to be quite high ($M=4.33$; $SD=0.77$), whereas behavioral willingness was quite low ($M=1.26$; $SD=0.56$). Participants reported being most constrained by family obligations ($M=1.31$; $SD=0.78$) and that the negotiation strategy they most employed was limiting how much money they spent at casinos ($M=1.28$; $SD=0.84$). Leisure constraint and constraint negotiation composite scales were created ($M=1.18$; $SD=0.41$, and $M=1.13$; $SD=0.37$, respectively), to ensure sufficient power for the planned regression analyses. Following Cohen’s et al. (2003) recommendation that more distal to more proximal items be entered in hierarchical regressions, self-reported casino gambling was: first regressed on PBC; then on PBC and behavioral intention; then on PBC, behavioral intention, and behavioral willingness; and finally on PBC, behavioral intention, behavioral willingness, and the leisure constraint and constraint negotiation composite scores. Regression results are reported below.

Hierarchical Regression Analyses Predicting Casino Gambling

Predictor(s)	β^1	β^2	β^3	β^4	R^2
Step 1					
PBC	0.28	0.19	0.12	0.18	.00
Step 2					
Behavioral Intention		0.51****	0.50****	0.50****	.52
Step 3					.54
Behavioral Willingness			1.40**	0.87	
Step 4					.59
Leisure Constraint				-3.79****	
Constraint Negotiation				5.16****	

* $<.05$ ** $<.01$ *** $<.001$ **** $<.0001$

Discussion and Conclusion

The purpose of this study was to examine the effects of perceived behavioral control, behavioral intention, behavioral willingness, leisure constraint, and constraint negotiation, on casino gambling. The discovery that PBC did not have a significant direct effect is consistent with other gambling and leisure studies that have used TPB (e.g., Walker et al., 2006; Hrubes et al., 2001, respectively). This could be because leisure activities are largely under volitional control rather than perceived control (cf. Hrubes et al., 2001), or because of measurement issues associated with PBC (cf. Rodgers et al., 2008). Behavioral intention, as expected, did predict casino gambling, with the resulting large effect size (Cohen, 1992) comparable with that found when TPB was used to predict lottery play (Walker et al., 2006). Given the explained variance in both cases is much greater than that typically found in other TPB studies (e.g., 31% in Armitage & Connor's, 2001, meta-analysis), this theoretical framework may be especially useful for understanding gambling behavior. Behavioral willingness was significant when entered in Step 3 (i.e., $p < .01$) but became insignificant at the customary probability level cut-off (i.e., $p < .05$) after leisure constraint and constraint negotiation were entered (i.e., $p < .07$). Still, given a comparable concept—spontaneity—has been identified as property commonly associated with leisure (Kleiber, Walker, & Mannell 2011), future leisure research involving behavioral willingness could prove beneficial. Finally, that leisure constraint negatively, and constraint negotiation positively affected casino gambling even after behavioral intention was entered clearly indicates the value of including these variables in subsequent TPB studies.

As with any research there are limitations to this study. First, the response rate is a concern. Second, a specific type of leisure activity was examined, and thus the results may not be applicable to other leisure and non-leisure activities. Third, although there was empirical support for using composite leisure constraint and constraint negotiation scores, greater insight could be gained by utilizing more precise measures in the future. Fourth, although hierarchical regression is typically employed to determine whether the inclusion of new variables improves TPB's predictability, use of this technique excludes identification of certain potential direct and indirect effects that may also exist. For example, based on the correlation between behavioral intention and leisure constraint (i.e., 0.36), the latter variable could mediate the relationship between gambling intention and behavior. Thus, future research should consider using structural equation modeling to fully test all of the relationships among the measured variables.

In spite of these limitations, this study is both consistent with Ajzen's (1991) appeal regarding further development of TPB as well as Crawford and Jackson's (2005) statement that leisure "constraints theory itself may someday be completely swallowed up by future theoretical developments, an event that would underscore both the integrative function of theory and the role of theory in science" (p. 161). While the latter is still a long ways away, integration of TPB and leisure constraint theory could prove highly beneficial for both the leisure studies field as well as mainstream social psychology. Moreover, the results of this study could also have practical implications, including identifying how casino operators could help individuals overcome some of the key constraints that inhibit them from gambling.

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