

Adolescent gambling: How much gambling-related cognitions matter in explaining problem behavior?

Recently, it has been shown that multidimensional models are useful to explain adolescent problem gambling, as a set of different factors contribute to the development of gambling-related negative consequences. However, the contribution of gambling-related cognitions, i.e. a wide array of different kind of erroneous beliefs and irrational thoughts on gambling, has not yet been deeply investigated inside multi-factorial models. It seems also to be unclear the underlying mechanism by which gambling-related cognitive distortions are related to problem gambling in youth. The aim of the present work was to further ascertain the role of gambling-related cognitions on adolescent problem gambling.

In Study 1, we investigated the role of gambling-related cognitions on problem gambling using a model comprising cognitive, dispositional, and social factors. One thousand-sixty-three high school students (60% Males, Mean Age = 15.69) completed the *South Oaks Gambling Screen-Revised for Adolescents* (SOGS-RA) (Winters et al., 1993), which measures problem gambling. Participants also completed the *Brief Sensation Seeking Scale* (BSSS; Hoyle et al., 2002), the *Gambling Attitude Scale* (GAS; Delfabbro & Thrupp, 2003), one subscale of the *How Peers Influence Me* (Sandstrom et al., 2008), i.e. *Feeling pressure to conform to peers* (FPCP), and the *Gambling Related Cognitions Scale* (GRCS; Raylu & Oei, 2004). A hierarchical regression analysis showed that gender, sensation seeking and feeling pressure to conform to peers predicted problem gambling. Nevertheless, once gambling-related cognitions total score was introduced into the regression analysis, the other independent variables became non-significant and only gender and gambling-related cognitions had a predictive power on problem gambling (Table 1).

In Study 2, we further investigated the role of gambling-related cognitions on problem gambling by testing a model in which probabilistic reasoning ability and superstitious thinking were related to problem gambling through gambling-related cognitions. Participants were 301 male high school students (Mean Age = 17.17). As well as the GRCS, participants were presented with the *Gambler's Fallacy Task* (GFT, Primi & Chiesi, 2011), to measure the ability to reason normatively avoiding the gambler's fallacy, and the *Superstitious Thinking Scale* (STS; Kokis et al., 2002), to measure superstitious thinking. A path analysis showed that the hypothesized model showed a good fit to the data (CFI=.97, TLI=.92, NFI=.96, RMSEA=.08). All coefficients were statistically significant and in the expected directions. Specifically, results showed that probabilistic reasoning ability had a direct negative effect on gambling-related cognitions, on which superstitious thinking had a direct positive effect. Gambling-related cognitions were directly and positively related to problem gambling (Figure 1). Moreover, probabilistic reasoning ability and superstitious thinking had both an indirect negative effect on problem gambling, respectively -.10 and .13.

Findings suggest that gambling-related cognitions have an important role in predicting problem gambling among adolescents. More specifically, they seemed to be affected by high levels of superstitious thinking and poor probabilistic reasoning abilities. As such, they have a role in mediating the relationship between probabilistic reasoning ability and superstitious thinking, to problem gambling. Practical implications can be drawn for prevention and treatment of problem gambling among youth.

Table 1.

Hierarchical regression analysis for factors predicting problem gambling (SOGS-RA scores).

Model	R^2	Adj R^2	F (df)	Model Comparison	ΔR^2	p	Predictors	β	p
Model 1: <i>Gender</i>	.018	.017	14.69*** (1,778)	-	-	-	Gender	-.14	<.001
Model 2: Model 1 + <i>BSSS</i>	.034	.031	13.56*** (2,777)	Model 2 – Model 1	.015	<.001	Gender	-.14	<.001
							BSSS	.12	<.001
Model 3: Model 2 + <i>GAS</i>	.102	.099	29.49*** (3,776)	Model 3 – Model 2	.068	<.001	Gender	-.09	<.05
							BSSS	.08	<.05
							GAS	.27	<.001
Model 4: Model 3 + <i>FPCP</i>	.119	.115	26.27*** (4,775)	Model 4 – Model 3	.017	<.001	Gender	-.09	<.05
							BSSS	.08	<.05
							GAS	.25	<.001
							FPCP	.13	<.001
Model 5: Model 4 + <i>GRCS</i>	.317	.313	71.97*** (5,774)	Model 5 – Model 4	.198	<.001	Gender	-.09	<.01
							BSSS	.15	.883
							GAS	1.84	.066
							FPCP	1.93	.055
							GRCS	14.98	<.001

*** $p < .001$

Figure 1.

Model of problem gambling with standardized parameters (paths are all significant at the .05 level or lower).

