The WAGER, Vol. 19(10) – Can outcome expectancies predict gambling problems in student-athletes?

September 17, 2014

In a [previous BASIS article](#), we described how people tend to drink more when they have positive expectations about the outcomes of their drinking . Although researchers have developed a better understanding of gambling behavior in adolescents and college students (LaBrie et al. 2003, Wickwire et al. 2007), researchers know little about the role of outcome expectancies in gambling behavior among collegiate students-athletes. Today, as part of our [Special Series on Addiction and College Students](#), The WAGER reviews a recent study that investigates how gambling outcome expectations might predict problem gambling in college student-athletes (St-Pierre et al., 2014).

Method

The researchers analyzed data from the 2008 National Collegiate Athletic Association (NCAA) survey of student-athlete gambling behaviors and attitudes (N=19,942; 62% male), a self-reported, voluntary, and anonymous survey.[12]

- The survey used a modified Gambling Activities Questionnaire (GAQ) to measure past 12 month frequency of participation in 14 gambling activities (Gupta and Derevensky 1996).
- The survey measured how much Enjoyment/Arousal, Self-Enhancement, Financial Gain, and Negative Emotional Impact participants expected to get from gambling in general.
- The survey used 10 questions corresponding to each of the 10 diagnostic criteria for pathological gambling (DSM-IV-TR) to measure problem gambling severity. Students considered as "at-risk" and "probably pathological gamblers" were classified as problem gamblers (Gillespie et al. 2007).
- The researchers used a random stratified sampling procedure, a method

where the sample is divided into groups before sampling, to select athletic teams to participate. In this case, this ensures that the sample represents schools from each of the NCAA divisions (I-III)

- All NCAA member colleges were invited to participate in the survey; however, sampling was restricted to no more than 3 athletic teams per school.
- The researchers explored the associations between problem gambling and gambling expectancies.

Results

- Male student-athletes were about 5 times more likely than Female student-athletes to report gambling problems in the last year.
- Participants who expected higher levels of gambling enjoyment were less likely to experience   problem gambling (Figure).
- On the other hand, participants who expected more financial gain and negative emotional outcomes were more likely to experience problem gambling (Figure).
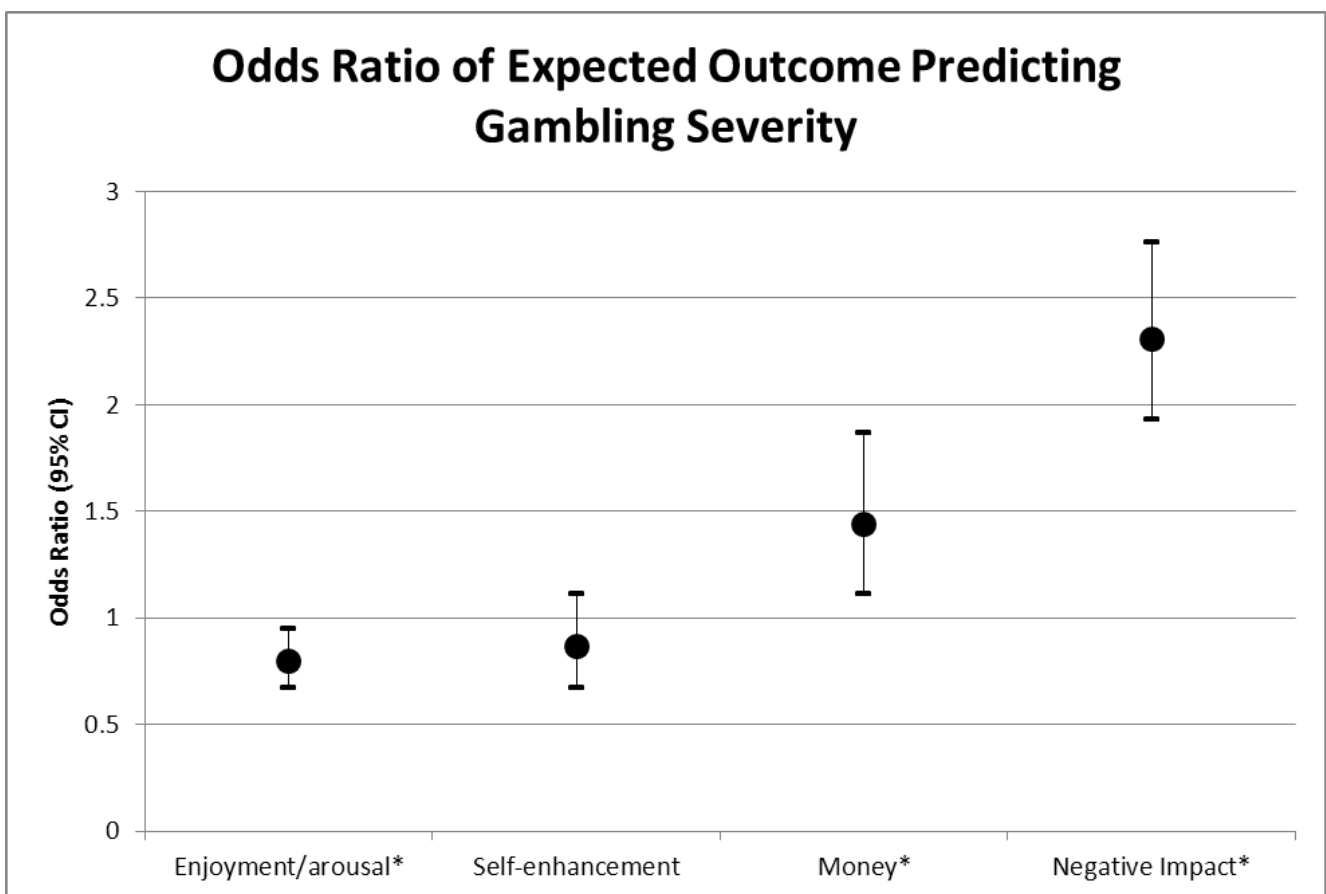

Figure. Odds ratios (dots) and 95% Confidence Intervals (lines) of having a gambling problem in the past 12 months based on gambling expected outcomes.

Odds Ratios above 1.0 represent higher rates of problem gambling and odds ratios below 1.0 represent lower rates of problem gambling so long as the confidence intervals do not cross 1.0 (adapted from St-Pierre, et al. 2014, * p < 0.01). Click image to enlarge.

Limitations

- The self-report nature of the survey means the data could be affected by self-presentation bias.
    - This is exacerbated by the possible implication of NCAA rules violations.
- Low number of female problem gamblers (n=26) means the study is unable to study the relationship between gender and outcome expectancies in predicting problem gambling
- Due to the design of the study, it is not possible to make any inferences regarding causality between gambling enjoyment, financial gain, or negative impacts of gambling, and problem gambling.

Conclusion

The study showed student-athletes who expected that their gambling would result in financial gain or negative emotions were more likely to experience gambling problems. Unexpectedly, student-athletes who expected that their gambling would cause enjoyment were less likely to report gambling problems. If future research confirms that these beliefs influence gambling problems, it might inform interventions. For example, students who are at-risk for gambling problems might benefit from interventions that teach them not to expect financial gain from gambling.

-Jed Jeng

What do you think? Please use the comment link below to provide feedback on this article.

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[1] Faculty athletics representatives at each institution administered the surveys following a specific protocol and script to selected teams and a student-athlete was responsible for collecting the completed surveys. No coaches or other team personnel were present.

[2] The researchers cleaned the data prior to the study: Incomplete surveys and surveys with inconsistent or contradictory responses were omitted (n=14,599) and surveys with missing DSM-IV-TR sections and individuals who were non-gamblers were also excluded from the study (n=7,517)