MOTIVES MODERATE THE RELATIONSHIP BETWEEN GAMBLER TYPE AND PROBLEM GAMBLING SEVERITY

R. Diandra Leslie & Daniel S. McGrath Department of Psychology, University of Calgary

INTRODUCTION

- Comparisons of online and offline gamblers consistently indicate that online gamblers are more likely to experience problem gambling¹.
- Although several studies show that online gamblers are more likely to engage in problematic play, there is a paucity of research examining why online gamblers are at greater risk of experiencing problems.
- Previous studies show that enhancement, social, coping, and financial motives are associated with problem gambling severity 2 .
- Previous research also shows that online and offline gamblers differ in terms of the motives they are most likely to endorse ³.
- It is possible that motives play a role in online gamblers' heightened problem gambling risk.
- The goal of this study was to examine whether enhancement, social, coping, and financial motives moderate the relationship between gambler type (i.e., online vs. offline) and problem gambling severity.

METHODS

Participants

• N = 494 young adults who had gambled online to any degree (n = 208) and exclusively offline (n = 286) in the past three-months were recruited from universities in Alberta, British Columbia, and Ontario.

Measures

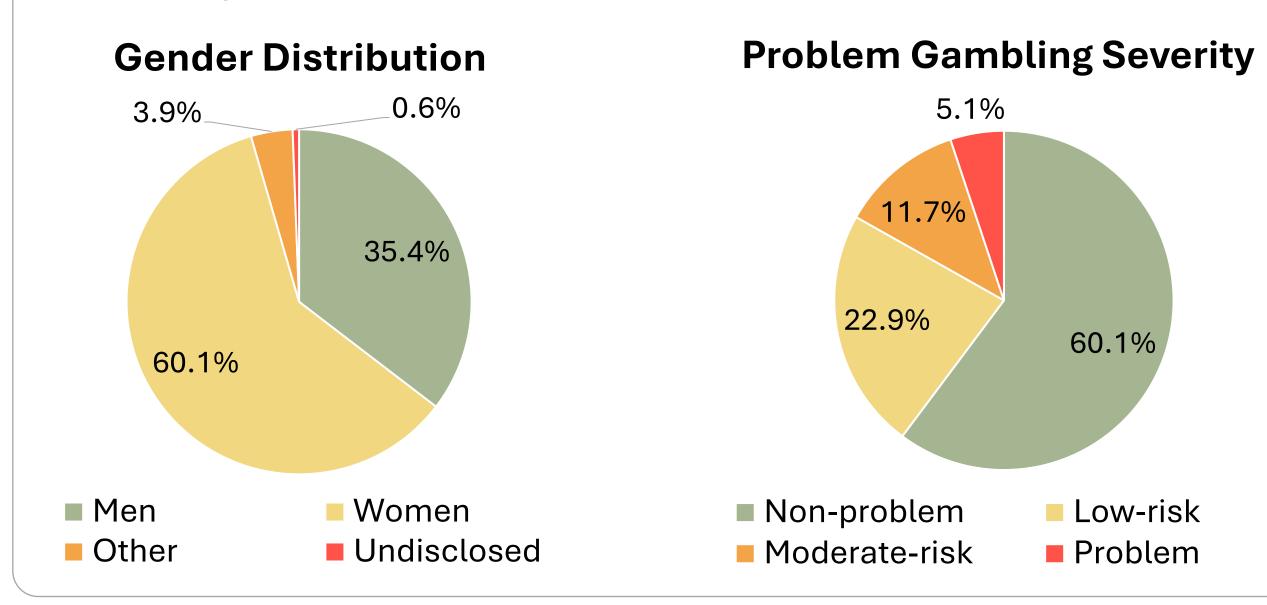
- Problem Gambling Severity Index (PGSI).
- Gambling Motives Questionnaire Financial (GMQ-F).

Statistical Analyses

- Independent samples t-tests.
- Moderated linear regressions using Hayes' PROCESS macro.
- GMQ-F scores range from 1.00 to 4.00 and were centered around a value of 1.00 prior to analyses, making 1.00 = 0.00 and 4.00 = 3.00.

SAMPLE CHARACTERISTICS

• Mean age = 23.12 ± 6.27 years



RESULTS

 $d = \text{Cohen's } d \mid \theta_{X \to Y \mid W} = \text{conditional effect of gambler type (X) on problem gambling severity (Y) at values of the moderator (W)$

Problem Gambling Severity by Gambler Type

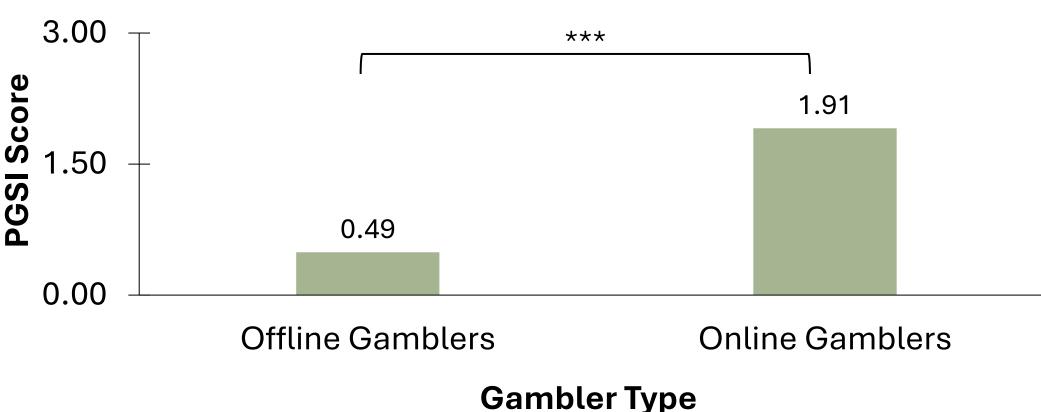


Figure 1. t(479) = -8.19, p < .001, d = 0.76.

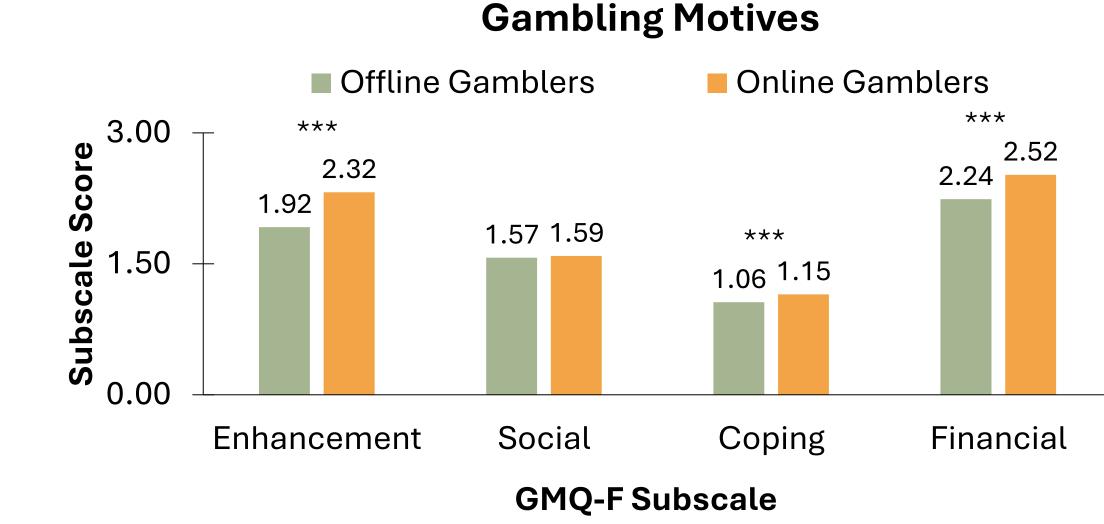


Figure 2. Enhancement: t(492) = -5.49, p < .001, d = 0.78; p < .001, d = 0.37; Financial: t(492) = -3.32, p < .001, d = 0.30.

Enhancement Motives —Offline Gamblers (X=0) --Online Gamblers (X=1)

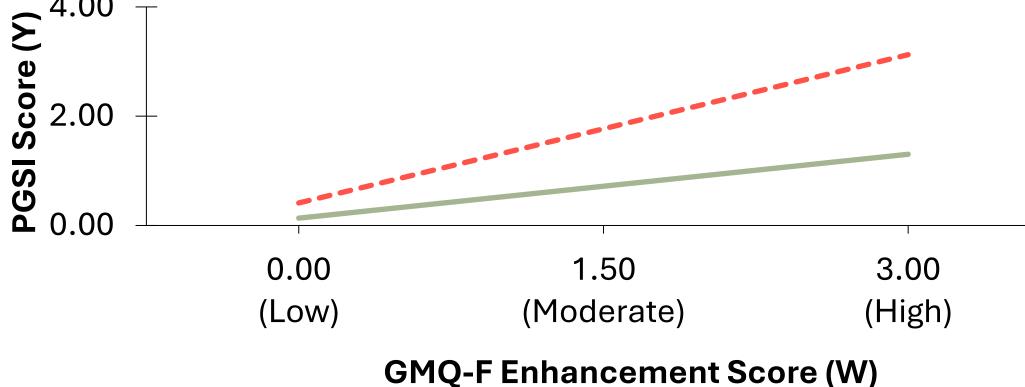


Figure 3. $\hat{Y} = 0.13 + 0.28X + 0.39W + 0.52XW$, $R^2 = 0.20$

- $X \times W$ Interaction = 0.52, p = .008
- $\Theta_{X \to Y \mid W = 0.00} = 0.28$, p = 0.278
- $\Theta_{X \to Y \mid W = 1.50} = 1.05, p < .001$
- $\Theta_{X \to Y \mid W = 3.00} = 1.82, p < .001$

3 2.00 0.00 3.00 0.00 1.50 (High) (Low) (Moderate) **GMQ-F Social Score (W)**

• $X \times W$ Interaction = 0.03, p = .927

Coping Motives

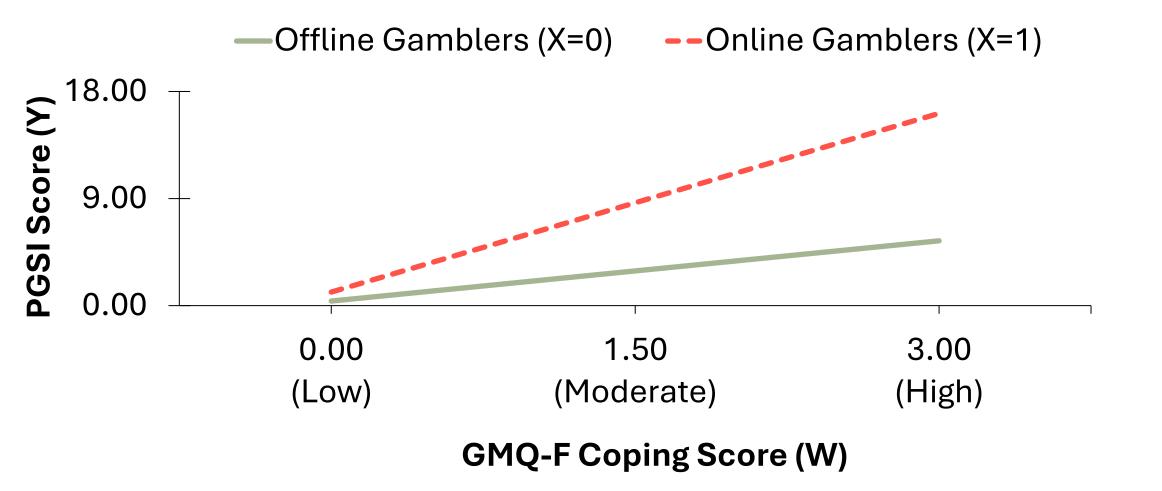


Figure 5. $\hat{Y} = 0.38 + 0.76X + 1.69W + 3.32XW$, $R^2 = 0.28$

• $\theta_{X \to Y \mid W = 3.00} = 3.84, p < .001$

X×W Interaction = 3.32, p < .001 • $\Theta_{X \to Y \mid W = 0.00} = 0.85, p < .001$ • $\theta_{X \to Y \mid W = 1.50} = 2.35, p < .001$

Financial Motives

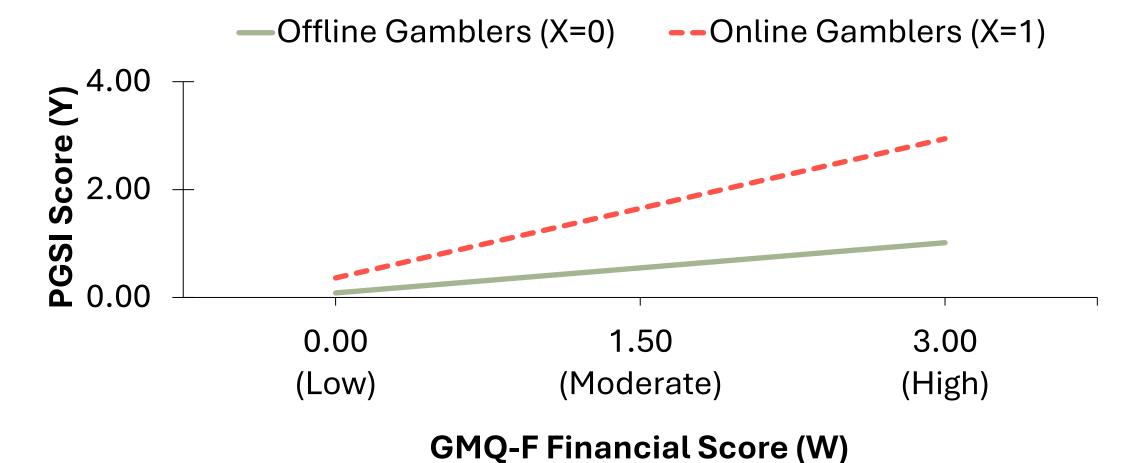


Figure 6. $\hat{Y} = 0.08 + 0.28X + 0.31W + 0.55XW$, $R^2 = 0.21$

- $X \times W$ Interaction = 0.55, p = .001
- $\Theta_{X \to Y \mid W = 0.00} = 0.28, p = .279$ • $\Theta_{X \to Y \mid W = 1.50} = 1.10, p < .001$
- $\Theta_{X \to Y \mid W = 3.00} = 1.93, p < .001$

relationship between gambler type and problem gambling severity. Social motives did not moderate this relationship.

Social: t(486) = -0.40, p = .345, d = 0.04; Coping: t(478) = -4.04,

Social Motives

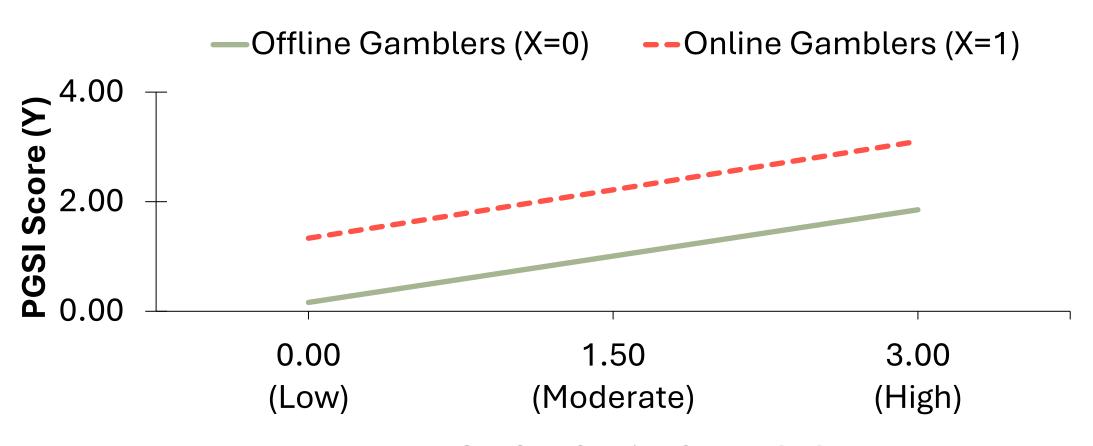


Figure 4. $\hat{Y} = 0.16 + 1.17X + 0.56W + 0.03XW$, $R^2 = 0.14$

Limitations and Future Directions

 This study relied on a convenience sample of university students. Future studies can improve on the generalizability of findings by recruiting representative and community-based samples.

addictive behaviours, and cognitive and psychological factors.

Figure 1: In-line with previous research findings 1, online gamblers reported

Figure 2: Online gamblers endorsed enhancement, coping, and financial

difference was not found for social motives. The results for social and

motives to a higher degree than offline gamblers. A statistically significant

Figures 3-6: Enhancement, coping, and financial motives moderated the

Specifically, online gamblers reported worse problem gambling severity

Coping motives had the strongest impact on problem gambling severity.

• Enhancement, coping, and financial motives appear to be important risk

suggesting that a focus of problem gambling prevention and intervention

develop adaptive coping strategies and realistic expectations about the

efforts targeted toward online gamblers could include helping players

Enhancement motives are associated with substance use, impulsivity,

and gambling-related cognitive distortions ^{2, 4}. Interventions that target

enhancement motives may need to address how they interact with other

• Findings from this study support suggestions made by Goldstein et al. 3,

indicating that online and offline gamblers may require different

approaches for problem gambling prevention and treatment.

For example, findings from this study offer preliminary evidence

Enhancement motive scores were moderate and high.

Coping motive scores were low, moderate, and high.

Financial motive scores were moderate and high.

factors for problem gambling amongst online gamblers.

worse problem gambling severity scores than offline gamblers.

coping motives are in-line with previous research findings ³.

scores than offline gamblers when:

likelihood of winning money.

REFERENCES

SUMMARY

Findings

Implications

- 1. Ghelfi, M., Scattola, P., Giudici, G., & Velasco, V. (2024). Online gambling: A systematic review of risk and protective factors in the adult population. Journal of Gambling Studies, 40(2), 673-699. DOI: 10.1007/s10899-023-10258-3
- 2. Allami, Y., Gooding, N. B., Young, M. M., & Hodgins, D. C. (2024). Why you gamble matters: A systematic review and meta-analysis of the association between gambling motivation and problem gambling. Journal of Gambling Studies, 19 14. DOI: 10.1007/s10899-024-10356-w
- 3. Goldstein, A. L., Vilhena-Churchill, N., Stewart, S. H., Hoaken, P. N., & Flett, G. L. (2016). Mood, motives, and money: An examination of factors that differentiate online and non-online young adult gamblers. Journal of Behavioral Addictions, 5(1), 68-76. DOI: 10.1556/2006.5.2016.003
- 4. Lambe, L., Mackinnon, S. P., & Stewart, S. H. (2015). Validation of the gambling motives questionnaire in emerging adults. Journal of Gambling Studies, 31, 867-885. DOI: 10.1007/s10899-014-9467-0





