

## YOUTH AND PROBLEM GAMBLING

Gambling at any level in youth can be especially problematic, as behaviors during this developmental period have potential to set the stage for learned problematic behaviors later. 50-70% of young people have reported gambling for money at least annually.1

In a meta-analysis of studies that have been conducted worldwide from 2000 to 2018, investigators found the prevalence of youth who meet criteria for problem gambling range from 0.2–12.3%.2 Internationally, between 4% to 8% of youth experience gambling related problems<sup>1</sup> whereas the U.S. past-year rate of problem gambling was reported at 2.6%.<sup>2</sup>



Among students in grades 9-12 who engage in problem gambling behaviors, students are more likely to be male, report hazardous drinking behaviors, and report suicidal ideation and/or attempts within the previous year.3



Motivations for gambling among adolescents are excitement (adrenaline rush) and enjoyment derived from the gambling itself, although boredom, loneliness, competition, escape from daily stressors, reduction of anxiety and depression, and socialization are among other motivators of gambling.6-8

Male adolescents are more likely to engage in problem gambling behaviors than female peers.<sup>3-5</sup>



Adolescents who engage in internet gambling have greater levels of at-risk and pathological gambling behaviors compared to those who engage in gambling offline.9



Truancy, going out at night, and being active in sports are predictive of youth gambling. Youth who reported not to have **not** gambled where more likely to report reading for pleasure, parental monitoring of evening activities, and parental restriction of money.<sup>10</sup>

<sup>1.</sup> Delfabbro, P., Thomas, A., & Armstrong, A. (2018). Gender differences in the presentation of observable risk indicators of problem gambling. Journal of gambling studies, 34(1), 119-

<sup>2.</sup> Calado, F., Alexandre, J., & Griffiths, M. D. (2017). Prevalence of adolescent problem gambling: A systematic review of recent research. Journal of Gambling Studies, 33(2), 397-424. 3. Turner, N.E., Cook, S., Shi, J., Elton-Marshall, T., Hamilton, H., Ilie, G., Wickens, C. M., McDonald, A. J., Trajtenberg, N., Cusimano, M. D., & Mann, R. E.. (2020) Traumatic brain injuries and problem gambling in youth: Evidence from a population-based study of secondary students in Ontario, Canada. PLoS ONE 15(10): e0239661.

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# PROBLEM GAMBLING RISK FACTORS IN ADOLESCENCE

#### Gender

- Among adolescents in Oregon, those who gender identify as male or "other" are more likely to engage in gambling compared to females. Those who identify as "other" are more likely to report gambling compared to males. 11
- Adolescent males engage in gambling more and experience more severe gambling problems than their female counterparts. Male youth have been found to make higher gross wagers, gamble earlier, gamble on more diverse activities, gamble more frequently, and spend more time gambling than female peers. 6,12,13

### Early Gambling Behaviors & Age

- Adolescents who engage in problem gambling report initiating gambling at 10 to 11 years old<sup>6</sup> and report having an early 'big win.'14,15
- Some research finds no association between age/grade and gambling<sup>3</sup> or at-risk gambling,5 while others conclude age/grade to be a predictor of problem gambling.4

### Peers & Mobile Interactions

- Connecting with peers primarily online and having friends who gamble similarly are risk-factors for problem gambling behavior among youths.4
- Regular engagement in mobile gambling (e.g., gambling using mobile devices) is a risk-factor for problem gambling.5

### **Future Orientation**

 Youth who expect their future to be 'much worse' than others were more likely to engage in gambling and risky gambling.16

#### **Other Risk-Factors**

Having parents who gamble excessively<sup>17,18</sup>

Substance problems<sup>17,18</sup>

Involvement in illegal activity<sup>17,18</sup>

Sensation seeking and impulsivity<sup>19-21</sup>

<sup>3.</sup> Turner, N.E., Cook, S., Shi, J., Elton-Marshall, T., Hamilton, H., Ilie, G., Wickens, C. M., McDonald, A. J., Trajtenberg, N., Cusimano, M. D., & Mann, R. E.. (2020) Traumatic brain injuries and problem gambling in youth: Evidence from a population-based study of secondary students in Ontario, Canada. PLoS ONE 15(10): e0239661.

<sup>4.</sup> Savolainen, I., Sirola, A., Kaakinen, M. et al. Peer Group Identification as Determinant of Youth Behavior and the Role of Perceived Social Support in Problem Gambling. J Gambl Stud 35, 15–30 (2019).https://doi.org/10.1007/s10899-018-9813-8

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## BULLYING AND PROBLEM GAMBLING

- Among high school males, being a victim of verbal bullying and the number of times they engaged in a gambling activity predicted high-risk gambling behaviors.<sup>22</sup>
- For high school females, being a victim of physical bullying and the number of times they engaged in a gambling activity predicted high-risk gambling behaviors.<sup>22</sup>



 Being a perpetrator of cyberbullying has been associated with an increased likelihood of engaging in problematic gambling.21

## DELINQUENCY AND PROBLEM GAMBLING

Oregon males in 8th and 11th grade who reported gambling were more likely to report being bullied. Individuals who identified as "other gender" in 8th and 11th grades who endorsed gambling are more likely to report being bullied than males and females. 11

- A recent review found that there was a consistent moderate relationship across studies between problematic gambling behaviors and delinquency among youth.<sup>23</sup> Studies suggest that problem gambling is associated with both violent and non-violent behaviors.
- Adolescents who endorsed two or more problem gambling items were significantly more likely to engage in theft, selling cannabis, being involved in gang-related fights, and carrying handguns than those who endorsed one or no items of problematicgambling.24
- A relationship has been found among high school students in the United States between involvement in serious physical fighting and at-risk or problematic gambling involvement. Attitudes that were permissive of gambling and at-risk gambling levels were associated with more frequency in adolescents reporting serious physical fights.<sup>25</sup>

<sup>11.</sup> Oregon Health Authority (2019). Oregon Healthy Teen Survey: Problem Gambling Data Analysis.

<sup>21.</sup> Pisarska, A. & Ostaszewski, K. (2020) Factors associated with youth gambling: longitudinal study among high school students. Public Health, 184, 33-40 22. Grande-Gosende, A., Richard, J., Ivoska, W., & Derevensky, J. (2020). The relationship between bullying victimization and gambling among adolescents. International Gambling Studies, 20(1), 80-96.

<sup>23.</sup> Kryszajtys, D. T., Hahmann, T. E., Schuler, A., Hamilton-Wright, S., Ziegler, C. P., Matheson, F. I. (2018). Problem gambling and delinquent behaviours among adolescents: A scoping review. Journal of Gambling Studies, 34, 893-914

<sup>24.</sup> Cook, S., Turner, N. E., Ballon, B., Paglia-Boak, A., Murray, R., Adlaf, E. M., Illie, G., den Dunnen, W., Mann, R. E. (2015). Problem gambling among ontario students: associations with substance abuse, mental health problems, suice attempts, and delinquent behaviours. Journal of Gambling Studies, 31, 1121-1134
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# SUBSTANCE USE AND PROBLEM GAMBLING

- Substance use is associated with problem gambling, particularly binge drinking, a
  history of inhalant use, tobacco, and other substances. However, within a European
  sample, cannabis use among youth was not found to be related to problem gambling.<sup>10</sup>
- Gambling among high school students in the United States has been associated with lifetime use of any drugs, including cannabis, cocaine, inhalants, heroin, methamphetamine, ecstasy, and non-medical pain relievers. Additionally, it has been associated with previous month involvement in cigarette smoking, alcohol and heavy alcohol use, and cannabis use.<sup>18</sup>
- Adolescents who perceive either concerning or excessive gambling within their family and peers are at a greater likelihood to engage in binge drinking compared to those who do not perceive such behaviors.<sup>18</sup>
- Adolescents engaged in at-risk level of gambling behaviors have been shown to be more likely to be engaged in severe drinking patterns and reported a greater likelihood of their parents' approval of their drinking.<sup>26</sup>

Oregon adolescents in 8th and 11th grade who engage in gambling behaviors are significantly more likely to report vaping, engaging in binge drinking episodes (5+ drinks on one occasion), and cannabis use (with the exception of 11th grade females for cannabis use).<sup>11</sup>

# LEARNING DISABILITIES AND PROBLEM GAMBLING

- A study conducted in Canada found that adolescents who were diagnosed with a learning disability were significantly more likely to engage in gambling activities than their non-learning disabled classmates.<sup>27</sup>
- However, both groups (adolescents with learning disabilities and without) significantly increased their gambling behaviors between 9th and 11th grade, though they did not increase at different rates from one another.<sup>27</sup>

<sup>10.</sup> Molinaro, S., Benedetti, E., Scalese, M., Bastiani, L., Fortunato, L., Cerrai, S., Canale, N., Chomynova, P., Elekes, Z., Feijão, F., Fotiou, A., Kokkevi, A., Kraus, L., Rupšienė, L., Monshouwer, K., Nociar, A., Strizek, J., and Urdih Lazar, T. (2018). Prevalence of youth gambling and potential influence of substance use and other risk factors throughout 33 European countries: first results from the 2015 ESPAD study. Addiction, 113: 1862–1873. https://doi.org/10.1111/add.14275.

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# MENTAL HEALTH AND PROBLEM GAMBLING

- Youth who engage in problem gambling report a greater frequency of ADHD and conduct-related problems,<sup>28,29</sup> multiple mental health problems including depressive symptomatology, 30 and are at greater risk for suicide ideation and suicide attempts.31
- Adolescents who endorsed two or more items on a problem gambling screen endorsed mental distress that was over four times as high as those who endorsed one or no items and the odds of those individuals reporting a suicide attempt was seventeen point eight times higher.24

Adolescents experiencing mental health, social, and interpersonal difficulties are at risk for short-term and long-term negative consequences associated with problem gambling.1

 Adolescents who engage in self-injurious behaviors have reported greater positive attitudes towards gambling and are more likely to be classified within an at-risk problem gambling level of engagement.32

## In Oregon

Males who reported gambling were significantly more likely to report feeling sad than females in 8th and 11th grade. Those in 8th grade who identified with "other" gender who reported gambling were more likely to report feeling sad than males and females.<sup>11</sup>



- 8th and 11th grade males who reported gambling were more likely to report thoughts of suicide. 8th grade "other" gender who endorsed gambling were more likely to report thoughts of suicide than males or females.11
- Males in 8th and 11th grade who report gambling were more likely to report having to take a suicidal act and "other" gendered individuals in 8th grade who reported gambling were more likely to have engaged in a suicidal act than males or females.11

<sup>1.</sup> Delfabbro, P., Thomas, A., & Armstrong, A. (2018). Gender differences in the presentation of observable risk indicators of problem gambling. Journal of gambling studies, 34(1), 119-

<sup>11.</sup> Oregon Health Authority (2019). Oregon Healthy Teen Survey: Problem Gambling Data Analysis.

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# PHYSICAL HEALTH AND PROBLEM GAMBLING

- Among high-school students in Ontario, Canada, traumatic brain injuries (TBIs) were found to be more common among students who exhibit problem gambling behaviors, although a causal relationship has not been determined.33
- High school students who are classified as "disordered gamblers" were found to have no significant differences in physical health compared to non-gambling adolescents.34







## PROBLEM GAMBLING PREVENTION AMONG YOUTH

## **Encourage Social Support**

- Higher perceived social support and connection with peers offline is related to lower problem gambling behaviors.4
- Assessing youth social involvement and peer connectedness may shed light on problem gambling risk factors. Encouraging social connectedness may intervene against developing problem gambling behaviors.

#### Encourage Parents to Discuss Gambling with Their Children

• Greater parental disapproval of mobile gambling is related to less engagement in mobile gambling, a behavior predictive of problem gambling.<sup>5</sup> Parents might consider having open conversations with their children about the risks of gambling.

### **Assessing Problem Gambling**

Assessment measures that are reliable and valid in assessing problem gambling among adolescents:

- The Canadian Adolescent Gambling Index (CAGI) Gambling Problem Severity Subscale (GPSS).33
- The South Oaks Gambling Screen-Revised Adolescent (SOGS-RA).<sup>35</sup>

<sup>4.</sup> Savolainen, I., Sirola, A., Kaakinen, M. et al. Peer Group Identification as Determinant of Youth Behavior and the Role of Perceived Social Support in Problem Gambling. J Gambl Stud 35, 15-30 (2019), https://doi.org/10.1007/s10899-018-9813-8

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# EDUCATIVE PREVENTATIVE PROGRAMS

There are several educational programs that have been developed to promote gambling prevention among adolescents, but there is insufficient outcome data to conclude that increased knowledge about gambling will reduce gambling behaviors in adolescents.36

- Prevention programs focusing on increasing protective factors against problem gambling, such as promoting accurate knowledge about gambling and teaching effective coping skills, have limited but emerging evidence suggesting effectiveness in addressing problem gambling behaviors. 36,37
- Prevention programs focusing on reducing risk factors for problem gambling, such as increasing mathematical abilities, correcting erroneous beliefs about gambling, and replacing irrational cognitions with rational cognitions, appear to be effective in reducing risk factors. Research is limited, however, on the impact programs have on actual gambling behaviors.36

## **Key Findings**

- Gambling has far reaching impacts for youth, with direct ties to substance use, mental health problems, physical health, bullying, and delinquent behaviors. With youth gambling being so interwoven with other areas of concern, addressing gambling problems among youth is an important area of consideration across research, intervention, prevention, and policy.
- Adolescents whose peers and family support, engage in, or have a permissive view of gambling drastically increases a youth's likelihood of engaging in various forms of gambling.
- Across studies and regions, gambling has consistently shown to be negatively related to youth mental health - as their gambling behavior increases, their mental health decreases. It has shown to have a positive relationship with substance use, such that as their gambling increases, they begin to engage in more substance use (alcohol, cannabis, etc.).