

## The Nexus of Video Gaming and Gambling: Exploring the Rise of New Gambling Forms

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# About me & my work

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## Internet Gaming Disorder and problematic technology use

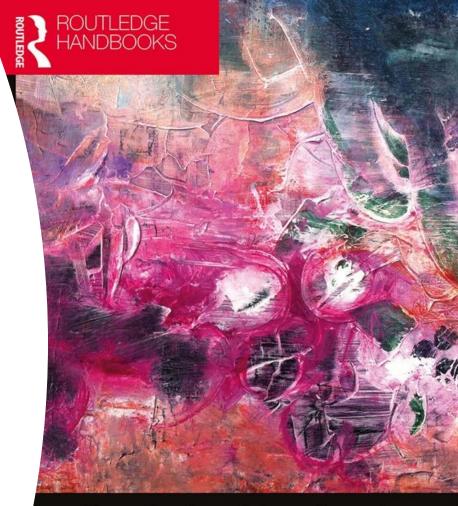
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- Scientific Director of video gaming and esports at Rutgers University Center for Gambling Studies
- Researcher on problem video gaming and gaming disorder, as well as other problematic technology use

#### :kground

al work has not, to date, adequately addressed behavioral, process addictions. Research established that gambling disorder can activate the brain's mesolimbic dopaminergic m, leading to persistent and compulsive behavior, in much the same way as psychoacsubstances (Grant, Potenza, Weinstein, & Gorelick, 2010). These and other scientific lts led the American Psychiatric Association (APA) in 2013 to reclassify gambling disr from an impulse control disorder to an addictive disorder, analogous to substance disorder in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders M-5; APA, 2013). Acknowledgment by the medical profession that behavioral addics exist and can cause the same degree of harm as substance use disorders has fueled arch concerning other potentially addictive behaviors. In particular, there exists cona over the potential psychosocial harms of excessive and problematic technology use g. Internet, video gaming, social media), particularly among youth. The importance this emerging area of research is further evidenced by an observed overlap between mbling and video gaming: aspects of video gaming may "prime" youth to spend increasg amounts of money in gambling activities that are dependent on random chance (see hapter 8 for more information).

Technology is a ubiquitous part of today's society, and underlying almost all interactive technologies is the Internet. More than 3.7 billion people worldwide accessed the Internet in 2017, which is a 933.8% increase over the number of Internet users in 2000 (World Internet Usage and Population Statistics, 2017). Whether for school, work, entertainment, socializing, bill payment, or general information, access to the Internet is critical to everyday life in many parts of the world. Increasing reliance on the Internet has spawned concerns about problematic Internet usage and Internet addiction (Young, 1998, 2004), exacerbated by the widespread use of mobile devices and smartphones that provide 24/7 Internet access (Taylor & Silver, 2019). Although research in this area is in its infancy, it is important to familiarize social workers and other professionals with the diagnostic features, risk factors, and emerging intervention programs related to problematic technology use.

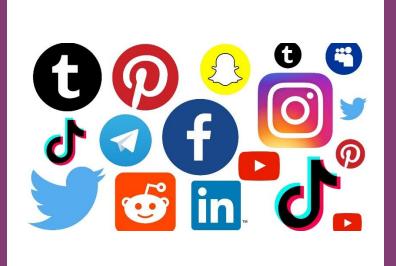


he Routledge Handbook of Social Work and Addictive Behaviors

Edited by Audrey L. Begun and Margaret M. Murray

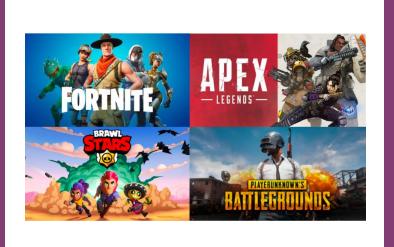






















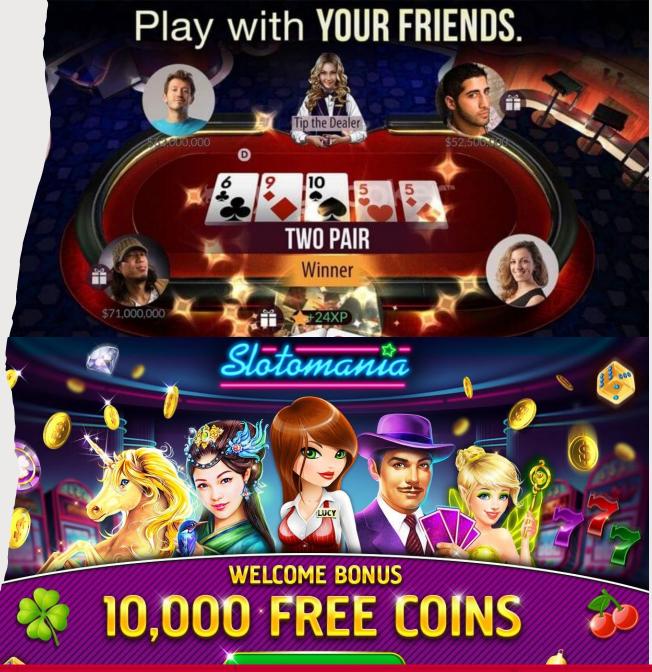
## MTX & Gambling-Like Activities in Video Games

- Microtransactions (MTX): players can buy game features and virtual items with micropayments
- Freemium model: free-to-play & pay-to-win
- Tactic for video game business to monetize through in-game and in-app purchases



### **Social Casino Games**

- Video games that simulate gambling activities and carry gambling elements
- Freemium model: free-to-play with in-game purchases
- Popular games: Slotomania, Double Down Casino, Zinga (Wizard of Oz Slots, Zinga Poker), Big Fish Casino
- \$7.28B USD industry in 2023 driven by mobile gaming, in-app spending, and increased use of social media platforms



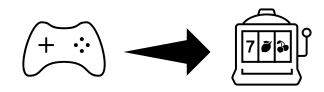
## **Social Casino Gaming OR Gambling**

Increase exposure to gambling-related contents and facilitate positive social attitudes toward gambling

Provide higher payout rates and chances for "big wins"

Use similar game designs, visual and audio effects, and gambling activities (e.g., wagering virtual money)





## **Social Casino Games:**

## Blurring the Lines Between Play and Gambling



Social casino games may introduce gambling behaviors to youth, fostering positive attitudes toward gambling and potentially priming them to gamble with real money in the future.



Can social casino games be repurposed as a harm reduction tool or a safer alternative for individuals at risk of problem gambling?



If virtual chips are considered a "thing of value"—as determined in Kater v. Churchill Downs Inc.—social casino games may legally qualify as gambling, rather than being categorized as traditional video games.

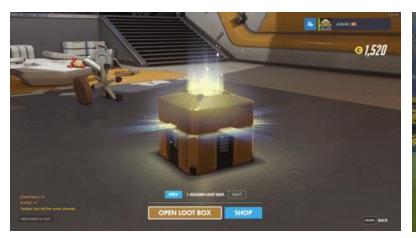


Problem social casino gaming may represent a unique subtype of digital addiction, characterized by symptoms of both problem video gaming and problem gambling.

## Problematic Social Casino Gaming Scale (Li, Mills, Nower, 2021)

- 1. Do you think about previous gaming activity or anticipate playing the next game?
- 2. Has social casino gaming become the dominant activity in your daily life?
- 3. Do you feel the need to spend increasing amounts of time engaged in social casino games?
- 4. Have you repeatedly made unsuccessful efforts to control, cut back, or stop your participation in social casino games?
- 5. Do you feel irritable, restless, or sad when social casino games are taken away or when you cannot access them?
- 6. Have you lost interest in previous hobbies and entertainment as a result of, and with the exception of, social casino games?
- 7. Do you continue excessive use of social casino games despite knowledge of psychosocial problems?
- 8. Have you lied to family members, therapists, or others regarding how often you play social casino games?
- 9. Do you use social casino games to escape or relieve a negative mood (e.g., feelings of helplessness, sadness, guilt, anxiety)?
- 10. Have you jeopardized or lost a significant relationship, job, or educational or career opportunity because of participation in social casino games?
- 11. Have you borrowed money or sold anything to get money for social casino games?
- 12. Has your social casino game use caused any financial problems for you or your household?







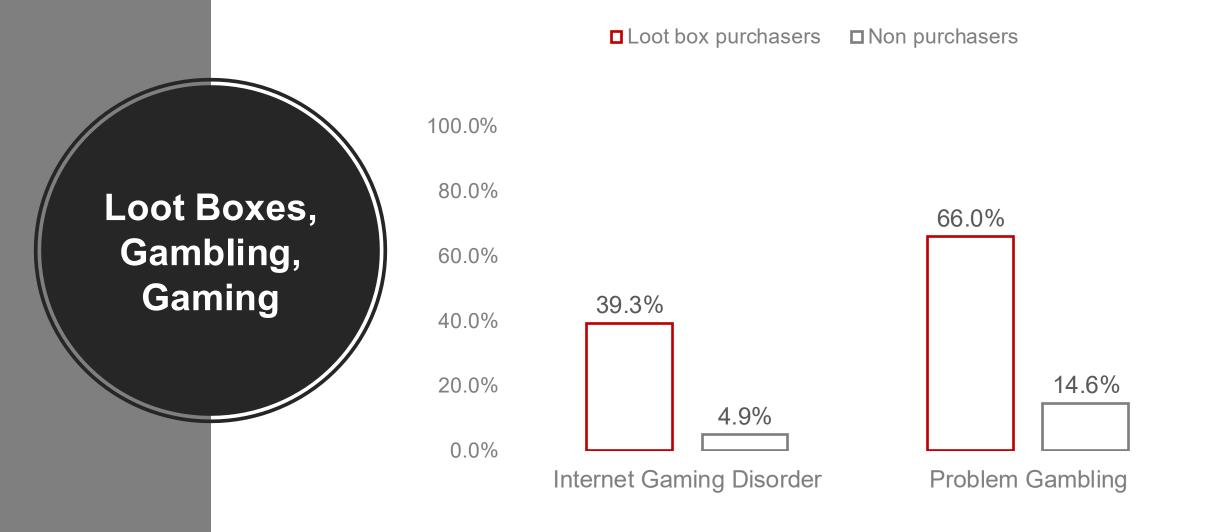


## Loot Box: Gambling-like OR Gambling

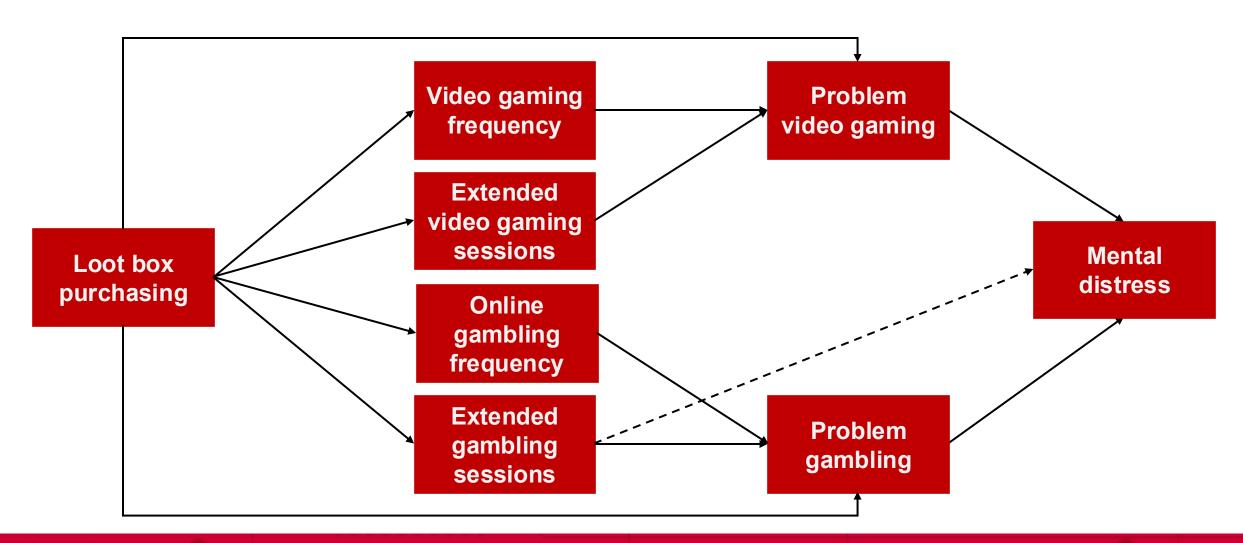
- Can purchase with money
  - Unknown future event
    - Chance
    - Can cash out







### Pathways from Buying Loot Boxes to Problem Gambling & Problem Gaming



#### Sample of Various Positions by Jurisdiction



#### **Belgium**

Classified some forms of loot boxes as gambling



#### UK

While no outright ban under current law, the House of Lords recently called for loot boxes to be regulated under the nation's gambling law

#### **Netherlands**

Classified some forms of loot boxes as gambling



#### France

Generally finds loot boxes outside the scope of gambling unless the player has the possibility to resell in real currency prizes won in the form of virtual objects or game levels, either in the game itself, or on a dedicated site



#### **New Zealand**

Does not interpret loot boxes within the scope of gambling laws

## **Skin Gambling**

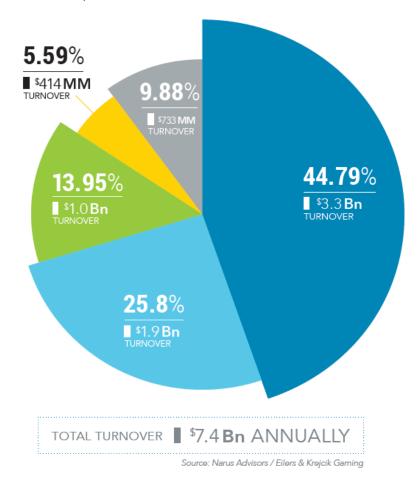


#### Skin

- Virtual, cosmetic items in video games
- Can be traded with real money
- Rare skins have higher values
- CS:GO

#### Skin gambling market size

The chart below shows our estimates for total amount wagered by product type. Numbers are handle (total amount wagered), not revenue, and reflect the market value of the skins bet.



\$618 MILLION
ANNUALLY
\$7.4 BILLION

2016
Total Value of Items Wagered on Skin Betting Sites

#### Product type

- Sportsbooks: Players bet skins on the outcome of esports matches, or on events within those matches.
- Jackpot: Players bet skins in lottery-style games.
- Roulette: Players bet skins in roulette-style games.
- Coin flip: Players bet skins on the flip of a virtual coin.
- Other: Raffles, rock-paper-scissors, mystery boxes, blackjack.



## **Esports: The New Super Bowl**

- Professional gamers play video games against each other in front of a live or online audience
- Competitions, matches, tournaments for big games: League of Legends, Dota 2; CS:GO, Call
  of Duty; Apex Legend, Fortnite; StarCraft; NBA 2K, etc.
- Resemble traditional sports events, involving professional athletes/players, teams, league sponsorships, spectators, high profile leagues and championships
- Opportunities for betting on outcomes of popular esports games



## **Esports Betting** with Real Money

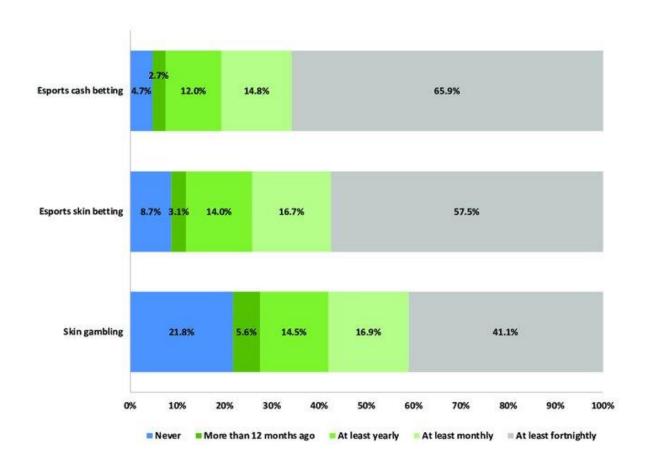
- Sportsbooks
- Online betting sites/APPs

## **Esports Betting with Skins**

Use **skins** as virtual tokens or currencies to bet on esports

#### Skins

- Virtual, cosmetic items in video games
- Can be traded with real money
- Rare skins have higher values



Greer et al., 2021. Gambling and video games: are esports betting and skin gambling associated with greater gambling involvement and harm?

## **Concerns About Esports Betting**

#### New opportunities to initiate gambling

#### Gateway effect to other gambling activities

- Esports betting may provide a normalizing gateway to betting on sports and other gambling activities
- One study found that 77% of adolescents who bet on esports also gamble on other activities (Marchica et al., 2021)

#### Youth and young adults may be more vulnerable to the potential harms

• One study found that < 3% of a sample have betted on esports, but > 50% of the esports bettors report problem gambling (Wardle et al., 2020)

#### Harms associated with betting with skins compared to real money

- Esports betting with skins is offshore and unregulated. Offshore websites may contain unsafe practices that
  place players at risk of fraud, lost funds, etc.
- One study found that skin bettors are 3X more likely to report problem gambling compared to those who bet with real money (Hing et al., 2022)

## Highlights from a Recent Epidemiological Study

**7%** of the entire sample (N=3,512) wagered on **esports** in the past year

- 33%: Less than once a month
- **34%:** a few times a month
- 15%: Once a week
- **9%**: 2–3 times a week
- **9%**: 4 or more times a week

#### **Esports betting by age group:**

- 14% of the sample under 21 gambled on esports
- 6% of the sample 21 and older gambled on esports

**Esports betting** is significantly associated with **problem gambling severity**, even after controlling for **14 other gambling activities** and overall gambling frequency.

## The Convergence of Video Games and Gambling





- Make gambling not easy to be identifiable to players and regulators
- Introduce children to gambling at a very young age and may prime them for the natural crossover to gambling with money



## The gambling-like features in video games encourage intense play and additional expenditure

- Generate feelings of reward and excitement
- Lead to further loses, more binge gaming sessions, and more problem video gaming behavior



## **Thank You!**



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### References

- Research and Markets. (2024, November 12). Online social casino market report 2024, featuring profiles of Tencent Holdings,
  Caesars Entertainment, Flutter Entertainment, International Game Technology and Aristocrat Leisure. GlobeNewswire.
   <a href="https://www.globenewswire.com/news-release/2024/11/12/2979024/28124/en/Online-Social-Casino-Market-Report-2024-Featuring-Profiles-of-Tencent-Holdings-Caesars-Entertainment-Flutter-Entertainment-International-Game-Technology-and-Aristocrat-Leisure.html">Aristocrat-Leisure.html</a>
- Wardle, H., Petrovskaya, E., & Zendle, D. (2020). Defining the esports bettor: Evidence from an online panel survey of emerging adults. *International Gambling Studies*, *20*(3), 487-499. <a href="https://doi.org/10.1080/14459795.2020.1826559">https://doi.org/10.1080/14459795.2020.1826559</a>
- Marchica, L., Richard, J., Mills, D., Ivoska, W., & Derevensky, J. (2021). Between two worlds: Exploring esports betting in relation to problem gambling, gaming, and mental health problems. *Journal of Behavioral Addictions*, *10*(3), 447-455. <a href="https://doi.org/10.1556/2006.2021.00045">https://doi.org/10.1556/2006.2021.00045</a>
- Hing, N., Lole, L., Russell, A. M., Rockloff, M., King, D. L., Browne, M., Newall, P., & Greer, N. (2022). Adolescent betting on esports using cash and skins: Links with gaming, monetary gambling, and problematic gambling. Plos One, 17(5), e0266571. <a href="https://doi.org/10.1371/journal.pone.0266571">https://doi.org/10.1371/journal.pone.0266571</a>
- Greer, N., Hing, N., Rockloff, M., Browne, M., & King, D. L. (2022). Motivations for esports betting and skin gambling and their association with gambling frequency, problems, and harm. Journal of Gambling Studies, 39, 339-362.
   <a href="https://doi.org/10.1007/s10899-022-10137-3">https://doi.org/10.1007/s10899-022-10137-3</a>
- Li, W., Mills, D., & Nower, L. (2019). The relationship of loot box purchases to problem video gaming and problem gambling. *Addictive Behaviors*, 97, 27-34. <a href="https://doi.org/10.1016/j.addbeh.2019.05.016">https://doi.org/10.1016/j.addbeh.2019.05.016</a>
- Li, W., Mills, D., & Nower, L. (2020). Validation of the problematic social casino gaming scale. International Gambling Studies, 20(3), 436-451.