



## The Relationship Between Gaming and Gambling Disorder

# Conflict of Interest

- CEO: Game Quitters
- Consultant: The Cabin Rehabs & Reset SummerCamp

# What Will You Learn?

- Three recent trends in the convergence of gaming and gambling and their risk for problem gambling
- Common techniques video games use to keep players engaged
- How to identify at-risk gamers using a validated screening tool
- Strategies to support problematic gaming treatment and recovery

# Who is Cam Adair?

- Addicted to video games for 10 years
- Became an escape from intense bullying, anxiety, and depression
- Dropped out of high school, pretended to have jobs, wrote a suicide note
- Founded [GameQuitters.com](https://gamequitters.com) to help others, now serving 75,000 members each month in 95 countries
- Named one of Canada's Leaders in Mental Health by CAMH
- Published in Psychiatry Research with Dr. Daniel King

# Massively Popular

- 2.3B active gamers worldwide (Newzoo, 2018)
- 54% Male and 46% Female (ESA, 2019)
- Average age: 32 (M), 34 (F)
- 83% of teenage girls play regularly, 96% of boys (Pew, 2018)
- Global Gaming Market is \$137.9B (Newzoo, 2018)
- Mobile revenues account for more than 50%

# Gaming Disorder

- Official recognition in ICD-11 by World Health Organization (May 2019)
- ‘Gaming Disorder’ is characterized by: 1) impaired control over gaming, 2) gaming takes precedence over other interests and daily activities, 3) and continuation or escalation of gaming despite the occurrence of negative consequences.
- The behavior pattern must be of sufficient severity to result in significant impairment in important areas of functioning
- Would normally have been evident for at least 12 months

# Screening Tool

- The Internet Gaming Disorder Scale (Lemmens, Valkenburg, & Gentile, 2015, APA)
- Psychological assessment, empirically supported
- Scale has two versions: a short (9-item) and long (27-item)
- Normal gamers: (score<2), risky gamers (2-4), and disordered gamers (5+) - **in the last twelve months**
- Online quiz for gamers or loved ones: [gamequitters.com](http://gamequitters.com)

# Warning Signs

- Pre-occupation
- **Withdrawal symptoms**
- Tolerance (King, 2017)
- **Unsuccessful attempt to control**
- **Loss of interest in previous hobbies**
- **Continued use despite negative impact**
- Deception
- Use of games to escape/relief negative mood
- Jeopardized or lost a lost significant relationship, job, education



# The Negative Impact

- School grades, school refusal, absenteeism, dropout
- Loss of face-to-face friendships and social isolation
- Mood changes (irritability, anger, boredom)
- Increased anxiety, depression, suicidal thoughts and attempts
- Poor sleep schedule, insomnia, staying up all night
- Loss of money, time, unemployment

# Problem Gamers

- Male (90%) adolescents are most at risk (5%), young adults (18-24) tend to experience negative impact
- Life revolves around gaming - user shifts priorities and takes shortcuts to maximize gaming
- Gaming is no longer a beneficial activity - they play because they cannot stop or control their behavior
- Gaming 30 hrs/week is a red flag, but 70 hrs/week or more is likely a problem

# Risk Factors

- Trait impulsivity
- Anxiety, Social Anxiety, Depression (48% - King, 2018)
- ADHD, Autism
- Low self-esteem
- Excessive porn and internet use
- More chaotic or insecure family environments
- Single-parent households
- Less structured routines and schedules

# Early 20s:

- Sold his truck for \$17,000
- Moved in with grandma
- Spends all day gaming or watching people play on Twitch
- Hangs out with online friends on Discord
- Mother doesn't know what to do
- Unemployment



# Why Gamers Play:

- Video games fulfill specific emotional needs: Temporary Escape, Social Connection, Constant Measurable Growth (Advancement), and Purpose
- Games are intentionally designed to keep you hooked using state of the art behavioral psychology
- Games are fully immersive, and provide hyper-stimulation (dopamine)
- Overexposure causes structural brain changes: numbed pleasure response, hyper-reactivity, and willpower erosion - take up to 90 days to reverse
- Gaming is a safe place to fail - real world failure can be permanent

# Peer Pressure

- Gaming is a community and a culture - these are meaningful relationships and may be their only relationships
- Gamers spend as much time playing games as they do watching other people play on websites like YouTube and Twitch
- Online world becomes a more reliable means of gaining social feedback and acceptance
- Gamers can feel guilty if they leave their game early because it lets their team down or they might fall behind in their skill level
- If they are not gaming they may be a social outcast at school

# Gamers Are Defensive

- Society has shamed gamers for being gamers (lazy, wasting their potential, those are not your ‘real friends’)
- This has created an Us. vs. Them mentality, which brings gamers closer together
- Shame and stigma are barriers for people to ask for help
- Don’t tell them “you’re addicted” as it hurts your relationship, instead focus on the behavior “you missed school today”

# Identity

- Gamers identify with being a ‘gamer’ and develop attachments
- They value their collection of games and achievements in the same way people value their real-world goods and relationships
- Their gaming history provides a record of progress, which is commonly a contrast to their lack of real-world progress
- Brain studies show addicts are more likely to identify with their online avatars to compensate for a poorer sense of self
- Tantrums/self-harm can be a form of anxious-attachment styles - similar to how it takes 90 days to get over a relationship ending



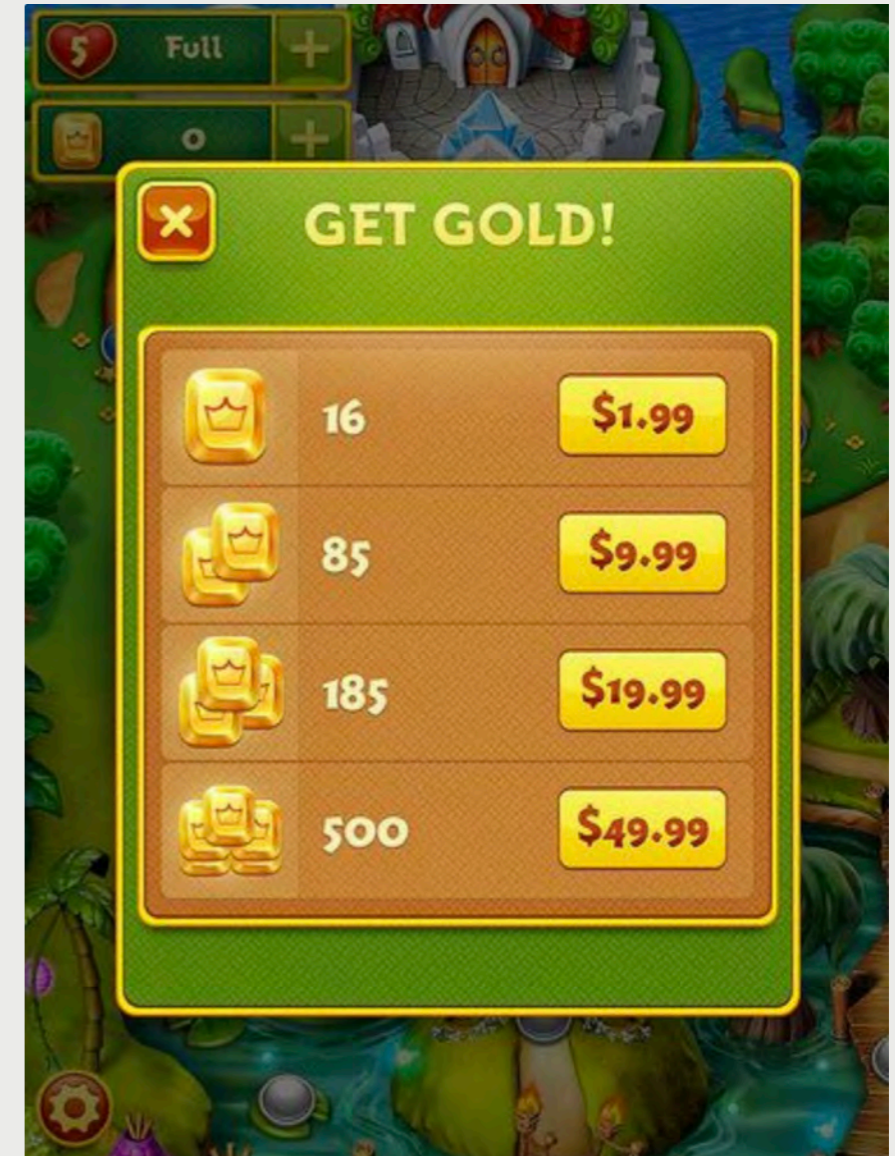
# Alarming Trends

# Games Have Changed

- Games used to be simple: Atari, Pong, Pacman
- Today games offer unlimited experiences of winning and losing, complex narratives and characters
- Large open worlds to explore, opportunities to socialize
- They are accessible on all of your devices
- Games are constantly changing to keep you involved (and spending money)

# Free-to-Play Games

- iPhone and App Store transformed gaming (mobile revolution)
- Business models changed from one-time purchase to being free with the opportunity to spend money within the game
- Games-as-a-service with additional downloadable content and micro transactions (consumables)





FEATURED

APEX PACKS

TRENDS

APEX COINS

2,150



2,000 Coins  
+150 Bonus

~~\$19.99~~  
\$17.99

sehoon just  
subscribed!

4,350



4,000 Coins  
+350 Bonus

~~\$39.99~~  
\$35.99

6,700



6,000 Coins  
+700 Bonus

~~\$59.99~~  
\$53.99

11,500



10,000 Coins  
+1,500 Bonus

~~\$99.99~~  
\$89.99

Origin access

10% MEMBER DISCOUNT APPLIED



# Fortnite Phenomenon

- The hottest game in the world: 250 million people play
- Free to play game has earned \$4B in revenue
- Fortnite: World Cup (\$30M in prize money, 16-year-old won \$3M grand prize)
- Parents are hiring coaches for their kids
- Battle Royale mode is a 100 player “last person standing”
- It’s cartoonish and retro (less gore and perceived violence)

# Fortnite Phenomenon

- It's free to play (low barrier, especially for kids)
- You level up within a 10-week season (unique rewards)
- Live map events and map changes (maintains hype)
- Daily challenges (keeps you coming back)
- Limited daily-refreshed shop (inclined to check daily)
- Available on all platforms

RESTORE  
PURCHASE

# + SHOP



★ 31



USD 1.99



USD 1.99



USD 3.99



USD 0.99



# ‘Educational’ Games

- Doctor Kids — kids play doctor/dentist
- Pop-up with an offer to purchase new mini games
- If child manages to press the X cancel, character on screen cries
- Game is marketed to kids as young as 6
- Structured so not spending money is wrong or shameful
- Study found 135 apps had manipulative advertising targeted to kids



# What are Loot Boxes?

- Items in video games that may be bought with real-world money but provide randomized rewards
- Different types: Skins (costumes), pay-to-win (FIFA)
- “Seemingly” random but odds are often not disclosed (and they can dynamically change based on your player data)
- Some have real-world value (you can trade, sell, or bet them)

# AWP | Dragon Lore

Covert Sniper Rifle



Souvenir Available

\$2,000



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Celia Hodent

Director of UX



# Let's Go Whaling

- Loot boxes are psychologically akin to gambling (Drummond, 2018)
- Large-scale study found link between the amount gamers spent on loot boxes and the severity of their problem gambling (Zendle, 2018)
- Within top 5% of spenders, 45% were problem gamblers
- Loot boxes are in 63% of top games in Google Play Store (1.6B downloads)
- 49% PEGI rated as suitable for children 7+, 93% for children 12+

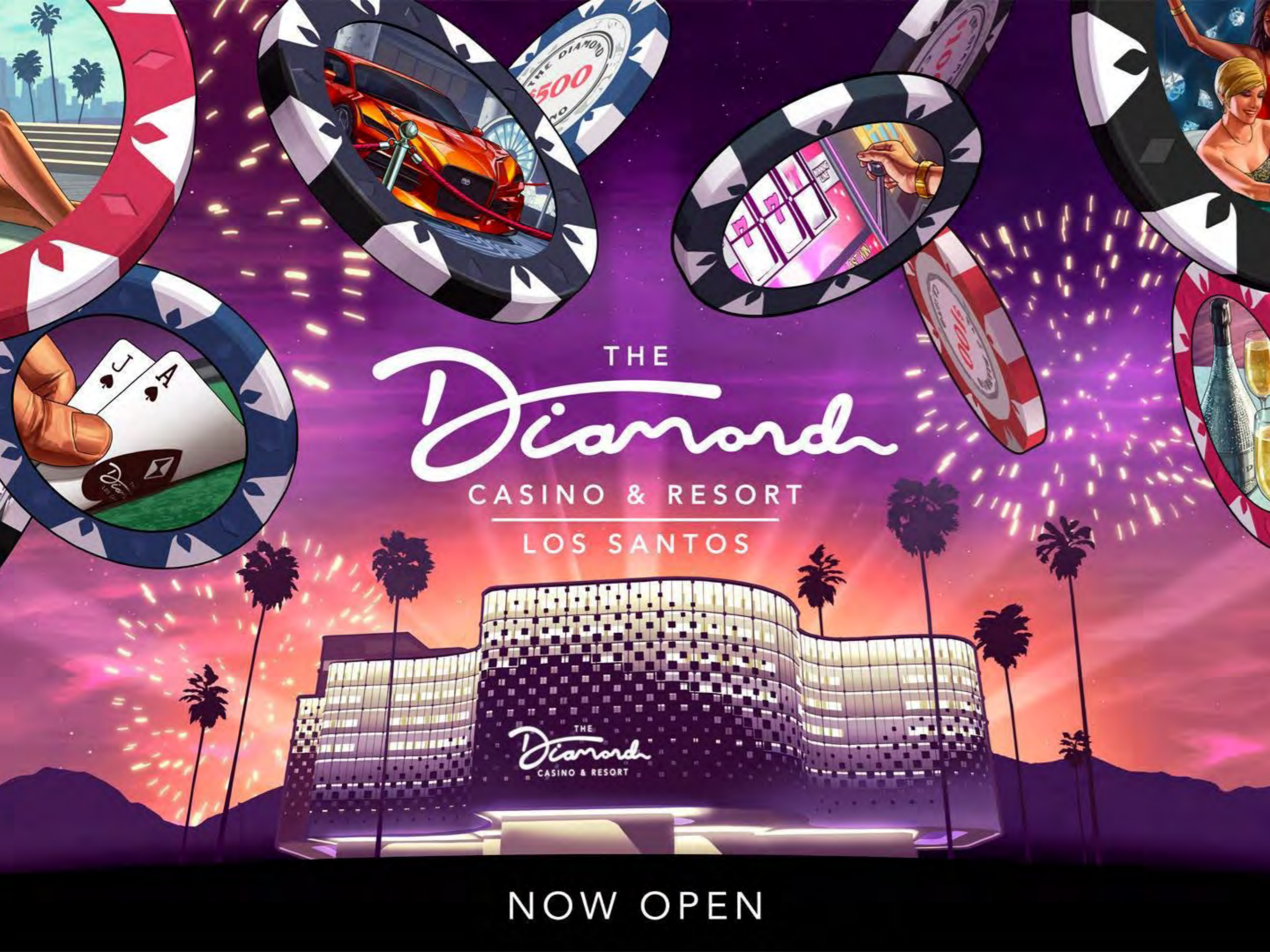


[evantubehd.com](http://evantubehd.com)

# Kinder Eggs or Slot Machines?

## Loot boxes and slot machines:

- Random distribution of prizes
  - Variable value of prizes
  - Near-miss features
  - Visual and sound cues associated with participation and reward
- Prize: Anything of value the sponsor awards in a promotion. (Example: real money or a virtual reward to advance in a game)
  - Chance: A process beyond the participant's direct control determines the outcome.
  - Consideration: Requires money or significant effort.



THE  
*Diamond*  
CASINO & RESORT  
LOS SANTOS

THE  
*Diamond*  
CASINO & RESORT

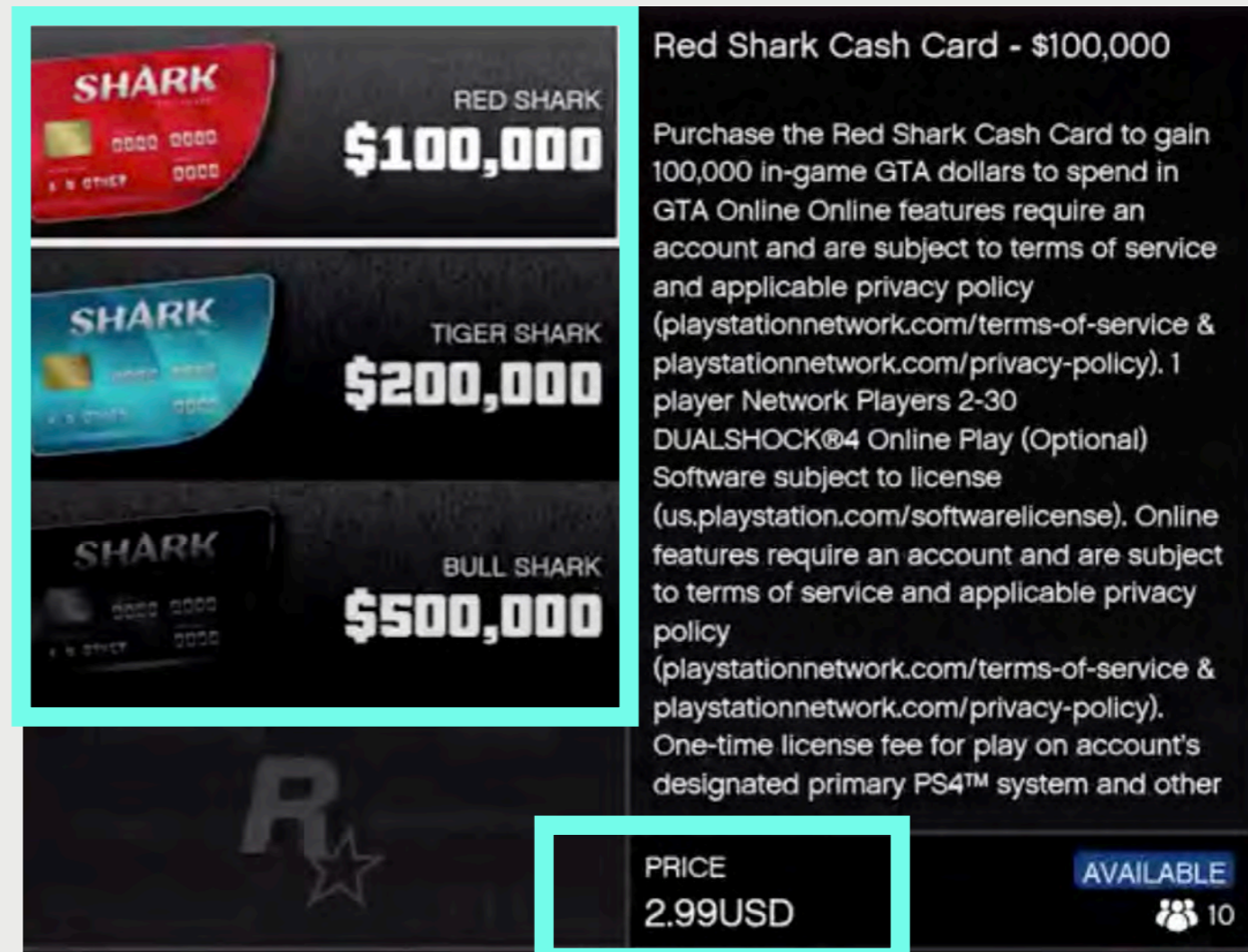
NOW OPEN





# GTA Online

- 50 million players
- Real money to gamble for virtual chips
- Spin the *lucky* wheel, play slots, horse racing, table games: roulette, blackjack, poker
- An estimated 5 million kids play this game



The screenshot displays three Shark Cash Cards in a vertical list. Each card is shown with its name and value: a red card for \$100,000, a blue card for \$200,000, and a black card for \$500,000. The cards are set against a dark background with a faint 'R' logo. To the right of the cards, there is a block of text providing details about the purchase, including account requirements and terms of service. At the bottom right, a price tag indicates 'PRICE 2.99USD' and an 'AVAILABLE' status with a player count of 10.

Red Shark Cash Card - \$100,000

Purchase the Red Shark Cash Card to gain 100,000 in-game GTA dollars to spend in GTA Online Online features require an account and are subject to terms of service and applicable privacy policy (playstationnetwork.com/terms-of-service & playstationnetwork.com/privacy-policy). 1 player Network Players 2-30 DUALSHOCK®4 Online Play (Optional) Software subject to license (us.playstation.com/softwarelicense). Online features require an account and are subject to terms of service and applicable privacy policy (playstationnetwork.com/terms-of-service & playstationnetwork.com/privacy-policy). One-time license fee for play on account's designated primary PS4™ system and other

PRICE 2.99USD

AVAILABLE 10

# Gateway to Gambling

- Simulated gambling may lead to real-world gambling: 26% had migrated to online gambling from social casino games (Kim, 2015)
- Simulated gambling normalizes gambling: it appears more positive, safe, normal or socially accepted, and may increase young people's confidence in gambling due to the relative ease of winning (King, 2018)
- Simulated gambling increases risk of problematic gaming (5.2% amongst FTP games - Dreier, 2017) and/or gambling (Kim, 2017)

## **Meet The 19-Year-Old Who Spent Over \$17,000 On Microtransactions**

**'My son spent £3,160 in one game'**

**'The kids emptied our bank account playing Fifa'**

“My addiction was slot machines, which is regulated in my country. And after years of being addicted, I got free, and stopped. Loot boxes started it all over again. It has exactly the same dopamine trigger, and the same programming of a slot machine. The cool colors, and sound effects please the addicted.” -Mo Kalifi.

# Parents Fault?

- Court documents revealed Facebook knowingly duped game-playing kids to spend money without parents permission
- Only 32% of parents said they knew what a loot box is, but less than a third of them selected the correct definition
- Parents aren't expecting a Disney game to try and prey on their kid
- Parents likely don't know a credit card is attached to the account
- Games can add gambling features post-launch and no physical copies will have a proper label (self-regulated)

# The Rise of Esports

- Esports is a term for organized competition for video games
- Universities are adding esports teams, and offering scholarships for esports
- 600 universities and 19,000 high schools in U.S.
- Revenues will cross \$1B in 2019

# 2010

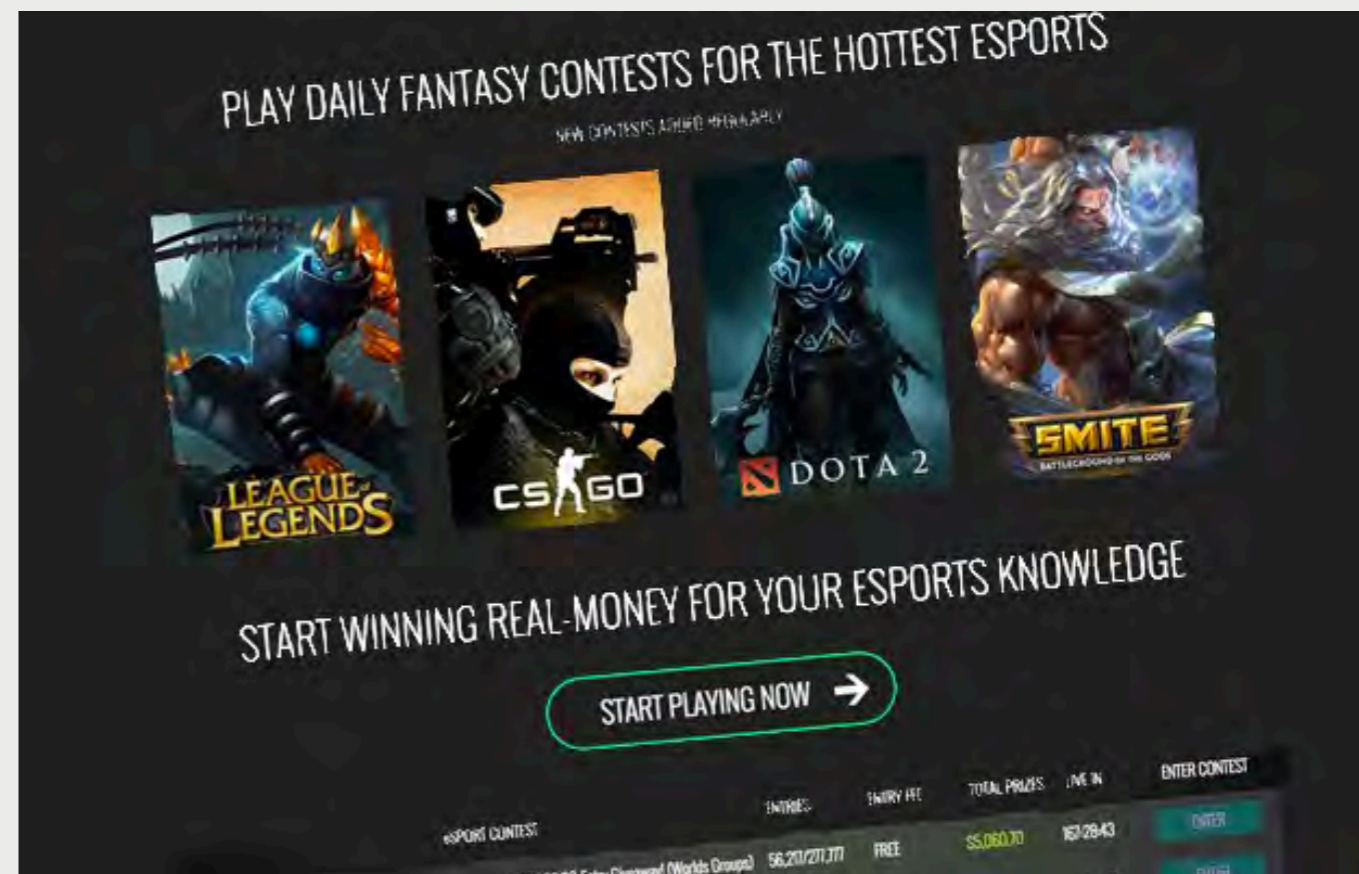


# 2017



# Esports Betting

- eSports arenas in casinos
- Betting on professional gaming teams
- Fantasy eSports
- Betting in-game items (“skins”)
- Esports betting est \$9.3B in 2019 (Eilers & Krejcik Gaming)



# Twitch & YouTube

- Twitch - 15M daily visitors, 355 billion minutes watched (2017)
- Amazon acquired Twitch for \$970 million
- Gamers spend just as much time playing as they do watching other people play
- Opportunity for gambling industry to advertise





credit: Brett Abarbanel

# CSGO: Skin Betting

- Counter-Strike: Global Offensive (CS:GO) introduced skins
- Skins are a unique way to decorate your weapons
- Exploded popularity of the game by 1,500% in two years
- Buy skin for cash, place bet in game, sell skin on third party site
- 3M players wagered \$2.3B worth of skins (2015), Valve received a 15% kickback
- CS:GO gambling industry was worth \$7.4B in July 2016

## FAMAS | Valence


Restricted Rifle

StatTrak Available



\$0.73 - \$4.55

\$2.55 - \$22.32

 Operation Wildfire Case

Inspect In-game (FN)

Search Steam Market

[FAMAS Valence Skin & Price Details](#)

## Five-SeveN | Triumvirate


Restricted Pistol

StatTrak Available



\$0.57 - \$1.46

\$2.22 - \$6.61

 Operation Wildfire Case

Inspect In-game (FN)

Search Steam Market

[Five-SeveN Triumvirate Skin & Price Details](#)

## Glock-18 | Royal Legion


Restricted Pistol

StatTrak Available



\$0.52 - \$3.00

\$3.04 - \$19.10

 Operation Wildfire Case

Inspect in-game (FN)

Search Steam Market

[Glock-18 Royal Legion Skin & Price Details](#)

## MAG-7 | Praetorian

Restricted Shotgun

StatTrak Available



## MP7 | Impire

Restricted SMG

StatTrak Available



## PP-Bizon | Photic Zone

Mil-Spec SMG

StatTrak Available



Trades

Bets

★ Sarn wants to trade: (just now)

Factory New Minimal Wear Field-Tested → Any Offers Any Knife



★ BronKs wants to trade: (just now)

Battle-Scarred → Minimal Wear



★ Big Ounce wants to trade: (just now)

Field-Tested Minimal Wear Minimal Wear → Field-Tested Well-Worn Minimal Wear  
Minimal Wear


44 minutes ago **LIVE**

TSM 53%  BO3 VS  EchoFox 47%



1 hour from now **BMC has 1-0 adv.**

BMC 76%  BO5 VS  Nexus 24%

2 hours from now

Cloud9 76%  BO3 VS  Splyce 24%

2 hours from now

Liquid 67%  BO3 VS  NRG 33%

# Gold Rush

- Activision generated \$7B in revenue (2017) and \$4B of it came from in-game transactions
- Video game industry in U.S. \$43.4B (up 18% from 2017)
- FIFA Ultimate Team made up 28% of EA's revenue (2017)
- Ninja was paid \$1M to play (stream) himself playing Apex Legends on the first day of its release
- Apex Legends reached 50M players in two weeks

# Industry Response

- FTC investigating Loot boxes
- Netherlands, Belgium: Loot boxes are gambling and now illegal
- U.K. Gambling Commission concerned but not illegal
- Australia Senate not sure



# Policy Suggestions

- Better inform consumers: transparency, prevention programs, loot boxes rated M for Mature (18+)
- Prevent gambling-related problems: parental controls, age verification in the digital age
- Facilitate treatment seeking and support recovery: gambling counselors most equipped to help problem gamers
- Increase evidence base: we need more research on loot boxes and the link between gaming and gambling

# Additional Resources

- [GameQuitters.com](https://gamequitters.com)
- 200+ videos and 70+ inspiring stories
- Step by-step guides for gamers and parents (Reclaim & Respawn)
- Residential Treatment: The Cabin (Thailand), reSTART (US)
- Game Quitters Parent Facebook Group



# Any Questions?

[camerondare.com](http://camerondare.com) | @camerondare | + 1 720 903 5032

cam@gamequitters.com | invite me to speak!

programs & resources: [gamequitters.com](http://gamequitters.com)

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