

*Fantasy, Gaming, and Gambling:
Identifying the Connection and Addressing the Issues*

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Agenda

1. Welcome
2. Fantasy Sports
3. Analysis of Gaming and Gambling
4. Convergence of Gaming and Gambling
5. Closing Thoughts and Q&A



The Marshmallow Test

- The 'Ultimate Test' in Delayed vs. Instant Gratification for a child!!



https://www.youtube.com/watch?v=QX_oy9614HQ

The Marshmallow Test Overview and Brief Summary

- 1960's
- Stanford Prof. Walter Mischel
- After test, researchers conducted follow up studies for 40 years and tracked the children in a number of areas
- Delay of gratification lead to higher SAT scores, lower rates of SUD and obesity, better at coping, social skills, and other life measures.

Q:WHAT CAN EARLY EXPOSURE TO GAMING OR GAMBLING DO TO A CHILD?

A:THINK OF WHAT IS BEING LEARNED:

- Immediate gratification
- Inability to develop patience or control
- Early exposure or a Big Win can be a predictor in future problems for gambling
- For gaming, speed and action dominate the brain (Overdrive)
- If coupled with unresolved trauma in childhood, can lead to multiple issues in the future

Landscape

- ◆ eSports is gaining in popularity
- ◆ Skill-based gambling is already at a casino near you!
- ◆ Internet gambling legalized in NJ in 2013 continues to grow.
- ◆ DFS is not legally considered gambling but it centers on wagering on player performance and is popular!

Facts and Figures

- ◆ The foundation of every addiction is built upon lies!
- ◆ Some children start gambling
AS EARLY AS age 10
- ◆ Teen gamblers are 2 – 4x more likely to develop a gambling problem than adults.
- ◆ Fantasy sports are on the rise!
- ◆ 1 in 5 Disordered Gamblers attempt suicide.

What are Fantasy Sports???

- Players compete against others by creating a team of professional athletes from a particular league
- The players earn points based upon how they perform in real life.
- Whoever has the most points at the end of the match, wins the prize



Fantasy Sports Trade Association Demographics

- 66% Male // 34% Female
- Average Age: 38.6
- College Degree or More: 66%
- Have a household income of \$75k+: 51%
- Have full-time employment: 67%
- Average Annual Spending Per Fantasy Player (age 18+): \$556

Fantasy Sports Trade Association Demographics (continued)

- Favorite Fantasy Sport: Football
- Fantasy Sports Players that Pay League Fee: 70%
- 57.4 million adults in North America participate
- 39% of Fantasy sports players use a mobile device compared to 25% in 2012
- 64% say they watch more sports because of fantasy
- Approximately 30% of the teen population in the United States has played a Fantasy sport contest.

2 Types of Fantasy Sports

Season Long

- Extended time until results and winner determined
- Slow and Steady
- Variance is smoothed over season and fixed prize.
- “Slow Growth Stock”

DFS

- Winner and results determined daily or weekly
- Immediate and instant gratification
- More variability and prize amounts
- “Volatile Tech Stock”

Types of DFS and the Future

- NFL
- NHL
- NBA
- MLB
- Auto Racing
- Rugby
- MMA
- Horse Racing
- Sumo Wrestling
- Cricket
- Golf
- eSports events
- “Fast Fantasy”
- “W/P/S Fantasy with exotics”

What are eSports???

- ◆ A global industry!
- ◆ Audience of 225 million people
- ◆ Revenue of nearly \$325 million in 2015
- ◆ Competitive gaming in real time
- ◆ 93 million Americans play video games
- ◆ Twitch streams tournaments live and 9.7 million people watch daily...now owned by Amazon who bought it for \$1 Billion in 2014



What about the Tournaments???

- ◆ Just as impressive!
- ◆ Over 3,200 tournaments
- ◆ Over 12,500 players
- ◆ Over \$89 million in prize money in 2016
- ◆ eSports lounges are opening in Casinos
- ◆ The future of eSports is all about the market, content, delivery, and wagering!
- ◆ Prevention, Treatment, and Regulators be ready...

Emerging Gameplay Trends

Here are 5 Emerging trends that are starting to shape the video gaming market in an effort to continually advance technology to the most realistic gameplay experience...

Emerging Trend #1

- ◆ More immersive digital entertainment and quality....Virtual Reality Gaming.
- ◆ Allows the escapism or action component to feel more real.
- ◆ Aspects of gameplay and fantasy may carry over reality for ultra hardcore gamers.



Emerging Trend #2

- ◆ Secondary screens within gameplay to access items while remaining connected and interacting within the game (Smart Glass).
- ◆ Allows the gamer to install an app on his or her mobile device that will interact with the gaming console for more control.
- ◆ Also allows the gamer to transition the game from the console to his or her mobile device in the middle of the game.
- ◆ Portability allows for 24/7 interaction and flexibility (Nintendo Switch)



Emerging Trend #3

- ◆ Open-source gaming leading to cheaper games and homemade games
- ◆ Allows novice game building and access to more options at a fraction of the cost.
- ◆ Increases competition, reduced monopoly, and more free-to play options to appeal to almost any demographic.
- ◆ Not as tightly regulated or reviewed for age appropriate content.

Emerging Trend #4

- ◆ Augmented Reality (AR) gaming.
- ◆ Think Pokémon!!!
- ◆ Virtual objects appearing in the real-world.
- ◆ Allows the gamer to interact with objects from the real world in real-time.



Emerging Trend #5

- ◆ Look to the Clouds!!!
- ◆ Allows games to be stored and accessed quickly.
- ◆ Updates can occur quickly.
- ◆ Portable
- ◆ Less storage needed on gaming consoles allows for larger graphics engines and improved quality.
- ◆ Explain the link from Emerging Trends to Gambling (EA Sports and Madden)

Social Casino Games

- The average PC social casino gamer will spend \$629 over a period of 9 months
- The average mobile device or tablet player will spend \$250 but tire of the game in about 7 months
- Mobile phone technological improvements make games like Candy Crush and Clash of Clans more accessible and attractive therefore cutting into social casino game participation

Are Social Casino Gamers the Next High-Risk Gambling Generation?

- 2016 revenues over \$1.6 Billion mostly from advertising
- Survey conducted on 2,010 Australians who gambled during the past year.
- 270 social casino gamers and 1,740 non social casino gamers
- Social casino gamers were more likely to fall into low (26%), moderate (15%), or problem (5%) areas than non-problem gambler (54%)
- Also less likely to see harm in gambling
- More likely to smoke (32% vs. 14% non-social casino gamers)
- Higher levels of illicit drug use.
- Typically male, under age 40, unmarried, and connected to internet

Why Do the Findings Matter?

- Social Casino Gaming is relatively new and expanding
- Unregulated Market
- If it triggers gambling urges or encourages mistaken beliefs about gambling, it could become problematic
- Does it make people more prone for a gambling problem or does it attract the prone people....? More research is needed.
- It does lead one to believe that the more frequently or varying ways that one exposes him or herself to activities, they can be placing themselves at an elevated risk for a problem.

Potential Pathways to Adolescent Gambling

- Social media advertising by gambling operators and social casino games.
 - Limited capacity by adolescents to analyze and discern the messaging.
- Social Networking Sites (SNS) using You Tube, Twitter, Facebook contains free to play games linking social components such as leaderboards and competitions.

Potential Pathways to Adolescent Gambling

- Social Casino Games: Easy, short duration, multiple devices, fun or competitive, isolation or social.
- Constant exposure normalizes the experiences
- Availability and Supply
- Positive experience + social interaction
- In game purchasing normalizes the habit of spending money on games....may carry to adulthood.
- Rewards and leveling up carries may carry over to comps in adulthood.

Potential Risks with Gaming

- Can lead to Problem Gambling.
- Bigger concern among the youth.
- The earlier one starts, the higher likelihood to develop a problem.
- The brain develops the “gas pedal” faster than the “braking system.”
- Inability to control impact on time or money.
- Illusions of Control
- Sense of identity and belonging.

VIDEO

How Counter Strike turned a teenager into a disordered gambler



The Connection and Progression of Gaming to Gambling

- Difficulty in differentiation between “Gaming” and “Gambling” activities in addiction research
- Many common features in terms of speed, aesthetics, and structure
- Both can create harm through excessive involvement
- Boundaries and lines are getting blurred (digital games with free and paid virtual currencies or items, as well as the capacity for wagering)
- Instant vs. Delay of gratification

The Connection and Progression of Gaming to Gambling (cont.)

- Gaming tends to be defined by its interactivity, skill-based play, and success or progress measured in a contextual / relative manner
- Gambling tends to be viewed through betting or wagering mechanics, predominantly chance oriented outcomes, intermittent reinforcement, and monetization involving risk and payouts.
- The earlier one starts an activity, the higher likelihood to normalize the behavior in the absence of negative experience

Convergence of Gaming and Gambling

- Yet language has converged and now some casinos refer to electronic gambling machines as “gaming.”
- Puts the emphasis on the entertainment component.
- Easy example to consider....social casino gaming (i.e. Zynga Poker and Double Down Casino)
- Simulate many features of gambling machines while allowing the opportunity for players to spend money.
- Availability is a constant but the delivery changes over time.

Examples of the Convergence and “Freemium” Sites

- Farmville – Popular on Facebook....People pay to tend to a virtual Farm
- Candy Crush – Over 100 million players and over \$1.5 billion in revenue (from new lives and extra features)
 1. Triggers mini-rewards in the brain by leveling up
 2. Releases dopamine and reinforces actions (Dopamine critical in learning, anchoring behavior, and training to continue)
 3. Levels get harder and wins and dopamine become more intermittent.

Candy Crush Continued

Candy Crush is essentially a game of luck with success dependent on the array of colors randomly given rather than one's swiping skills.

Reward schedule is unexpected (variable ratio reinforcement) and same used by traditional slots

Can't predict when the win will occur but it will occur just often enough (illusion of control)



Convergence of Gaming and Gambling

- Global Access
- Large Markets
- Increased exposure and interaction with gambling themes; promoted on social media and online games (eSports, VR betting, and betting on virtual items)
- Research often lags behind the technological offerings due to the fast release

The Impact of Technology on Gambling:

- Accessibility
- Affordability
- Anonymity
- Convenience
- Escape
- Immersion / Dissociation
- Disinhibition
- Event Frequency
- Interactivity
- Simulation
- Asociability

5 Primary Types of Convergence of Gaming and Gambling

- 1) Introduction of gambling elements to games on social media
- 2) Cross-selling or marketing of online or land based gambling sites to social gaming consumers
- 3) Introduction of social gaming sites to online gambling consumers
- 4) Consolidating similar games on non-monetary social gaming and online gambling sites by the same operator
- 5) Creating “gambling” opportunities on non-gambling games so consumers can win items of value (Red Dead Redemption.)

Motivators and Advantages around Internet Gaming and Gambling

- Convenience and Accessibility
- Greater value for dollar spent (i.e. payout rates and bonuses)
- Speed and Ease of Betting
- Variability and Robust Selection
- Comfort and lack of stigma

Factors Associated with Problematic Gaming and Gambling Addiction:

Behavioral / Emotional

- Neuroticism
- Aggression / Hostility
- Avoidant tendencies
- Loneliness and introversion
- Low emotional intelligence
- Boredom inclination
- Lack of agreeableness
- Loss of self-control
- Low self-esteem
- Sensation seeking (Adolescent's need no help with this one!)
- Social inhibition

Problematic Cognitions with Gaming and Gambling Addiction

- Allows the behaviors to hang around longer
- No amount of time spent is ever enough
- Continue until a level, reward, or feature is completed
- Gaining power and status through the game
- Escaping the real world
- The computer or console is an “electronic friend.”



Factors Associated with Problematic Gaming and Gambling Addiction:

Comorbidity

- ADHD
- Generalized Anxiety Disorder symptoms
- Panic
- Social Disorder
- Depression
- Social Phobia
- Various Psychosomatic symptoms

Factors Associated with Problematic Gaming and Gambling Addiction:

Biological

- Through the use of functional MRI, gaming or gambling addicts show similar neural processes and increased activation areas similar to behavioral and substance related addiction.
- Some genetic predisposition has to be considered



Factors Associated with Problematic Gaming and Gambling Addiction:

External

- Game design (world, characters, goals)
- Colors
- Aesthetics
- Speed of play
- Where the reinforcement of bonus and levels occur

SUMMARY of Internet Gaming /Gambling and Problem Gaming / Gambling Connection

- ◆ Sense of Identity
- ◆ Digital Currency versus Paper
- ◆ Privacy
- ◆ Fully Submersive
- ◆ Interactive / Rapid Feedback
- ◆ Game Specific Characteristics
- ◆ Leveling up = Dopamine burst!

SUMMARY of Internet Gaming /Gambling and Problem Gaming / Gambling Connection Continued

- ◆ Speed of Play / Faster Reinforcement
- ◆ Continuous Action
- ◆ Ease of Access
- ◆ Linked Accounts for Speed of Deposits
- ◆ Social Interaction
- ◆ Endless Competition

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