

# Specific Internet Use Disorders:

*Internet Gaming Disorder & Online Gambling*





*“Recently, a student sought help with what he described as his addiction, a not uncommon occurrence. Trying to consider which drug or combination of drugs would prove to be the culprit (the usual account), it was surprising to discover that the addiction involved characters with the unlikely names of PAC-MAN®, Blinky, Pinky, Inky, and Clyde. The student was hooked on video games!”*



# History

- Problem gaming behavior has been observed since the 1980s
- Problematic online gambling first document in the mid 1990s
- 'Gamers' make up around 66% of the US population
  - 46% female
  - The largest age bracket is 18-35 years old
- Different types of games
  - Multiplayer combat games
  - Single player games
  - Massively Multiplayer Online Role Playing Games (MMORPG's)



# Why Are Games So Engaging?

- Challenging but Achievable
  - Tailored to your current skill level
- Support
  - “In-world” support and encouragement from characters
  - “Off-world” support from fellow players
- Immersion
  - Allows for realistic role play, you can be a hero or a villain
- Anonymity
  - Allows for identification with your avatar or gamer tag



# Problematic Gambling Online

- The Internet may have made gambling more accessible to some groups
  - Online gamblers may prefer the anonymity and privacy of the Internet
  - May be more accessible to people with disabilities. A survey of online gamblers found that those with a disability constituted 12.6% of the total sample but 25% of the sample of 'problem gamblers'
- Online problematic gamblers are more likely to be male, gamble alone, gamble for more than 4 hours at a time, and drink alcohol while gambling
  - Similar to characteristics of gamers, however gamers tend to be younger, single, and unemployed.
- Online gambling is associated with riskier gambling behavior. Possibly due to a wider range of games being played online vs offline.



# Pathological Gaming and Addiction

- Measures of pathological gaming incorporate factors such as withdrawal, loss of control, relationship conflict
  - These factors are also typical of addictions
- These measures also correlate highly with motivations also seen in addictions; use of video games to relax after a bad day, playing games is the only way I can 'be myself' etc.
- Perhaps for this reason, pathological gaming has been studied within the same framework used to study substance addiction



# DSM-5: Internet Gaming Disorder

Causes distress or impairment as indicated by **five or more** of the following within a 12 month period

1. Preoccupation with Internet games (except for internet gambling)
2. Withdrawal symptoms when Internet gaming is taken away
3. Tolerance – the need to spend increasing amounts of time engaged in internet games
4. Unsuccessful attempts to control the participation in Internet games
5. Loss of interests in previous hobbies and entertainment as a result of, and with the exception of, Internet games
6. Continued excessive use of Internet games despite knowledge of psychosocial problems
7. Has deceived family members, therapists, or others regarding the amount of Internet gaming
8. Use of Internet games to escape or relieve a negative mood
9. Has jeopardised or lost a significant relationship, job, or educational or career opportunity because of participation in Internet games.



# DSM-5: Gambling Disorder

- Gambling Disorder in the DSM-5 has similar diagnostic criteria with a few notable differences:
  - “Often gambles when feeling distressed”
  - After losing money gambling, often returns another day to get even (“chasing” one’s losses).
  - Relies on others to provide money to relieve desperate financial situations caused by gambling.
- Must not be explained by a manic episode





# Diagnosis Debate: Criticisms

- Tolerance
  - There is a limit on the amount of time one can spend gaming (i.e. only 24 hours in a day)
- Deception
  - Consoles/PC's are usually in common areas. Not applicable to people living alone
- Internet Gaming Disorder?
- Do all criteria actually assess psychopathology (impairment and distress)?



# Diagnosis Debate: Clarity Needed

- Withdrawal symptoms
  - Not clear what these ‘symptoms’ are – unpleasant symptoms after stopping playing or prevented from playing?
- Loss of interest in other activities
  - May also reflect normal developmental processes
  - Also a symptom of depression



# Diagnosis Debate: Consensus

- Lack of control
  - Inability to stop despite a desire to do so is a defining characteristic
- Escape adverse moods
  - Also characteristic – and useful in understanding the motive for gaming



# Prevalence

- Huge variation in assessment methods and criteria make comparisons difficult
  - A systematic review of the literature found prevalence between 0.7-27.5%
- Prevalence among adolescents: 4.6%
  - 6.8% among boys
  - 1.3% among girls
- German sample (12-25 years): 7% prevalence
  - 8.4% males
  - 2.9% females



# Harmful Outcomes?

- Harm may lie in the amount of time invested in gaming, resulting in the neglect of basic daily activities, offline social interaction, and other duties and responsibilities
- Research on adolescents finds associations between pathological gaming and poorer grades, poorer relationships with parents, and conduct problems alongside normative beliefs around aggression, and hostile attribution biases
- Other co-occurring and comorbidities include depression, loneliness, social anxiety, and low self-esteem

*Does the harm come from time spent playing, or reasons for playing?*



# Etiology: Risk and Protection

- Risk Factors
  - Low social competence
  - Poor emotional regulation (inc. impulsivity)
  - Anxiety
  - Childhood emotional trauma
  - Dysfunctional family relationships
- Protective Factors
  - Higher executive functioning (may account for decreased prevalence among females)
  - Inverse of risk factors, especially emotional regulation



# Components Model

*Developed by Mark Griffiths from the International Gaming Research Unit in the UK to explain addictive behaviours and argues they all contain these common components:*

- Salience: The importance of an activity. Covers addictive aspects around preoccupation, cravings, and deterioration of social behavior
- Mood Modification: Akin to a 'rush' or 'buzz' from substance ingestion. Covers aspects of escape, and use of the behaviour as a coping strategy.
- Tolerance: Increased use to get same effect
- Withdrawal: Unpleasant effects of cessation or reduction
- Conflict: Interpersonal and inner conflict
- Relapse: Repeated reversion to earlier patterns of behaviour

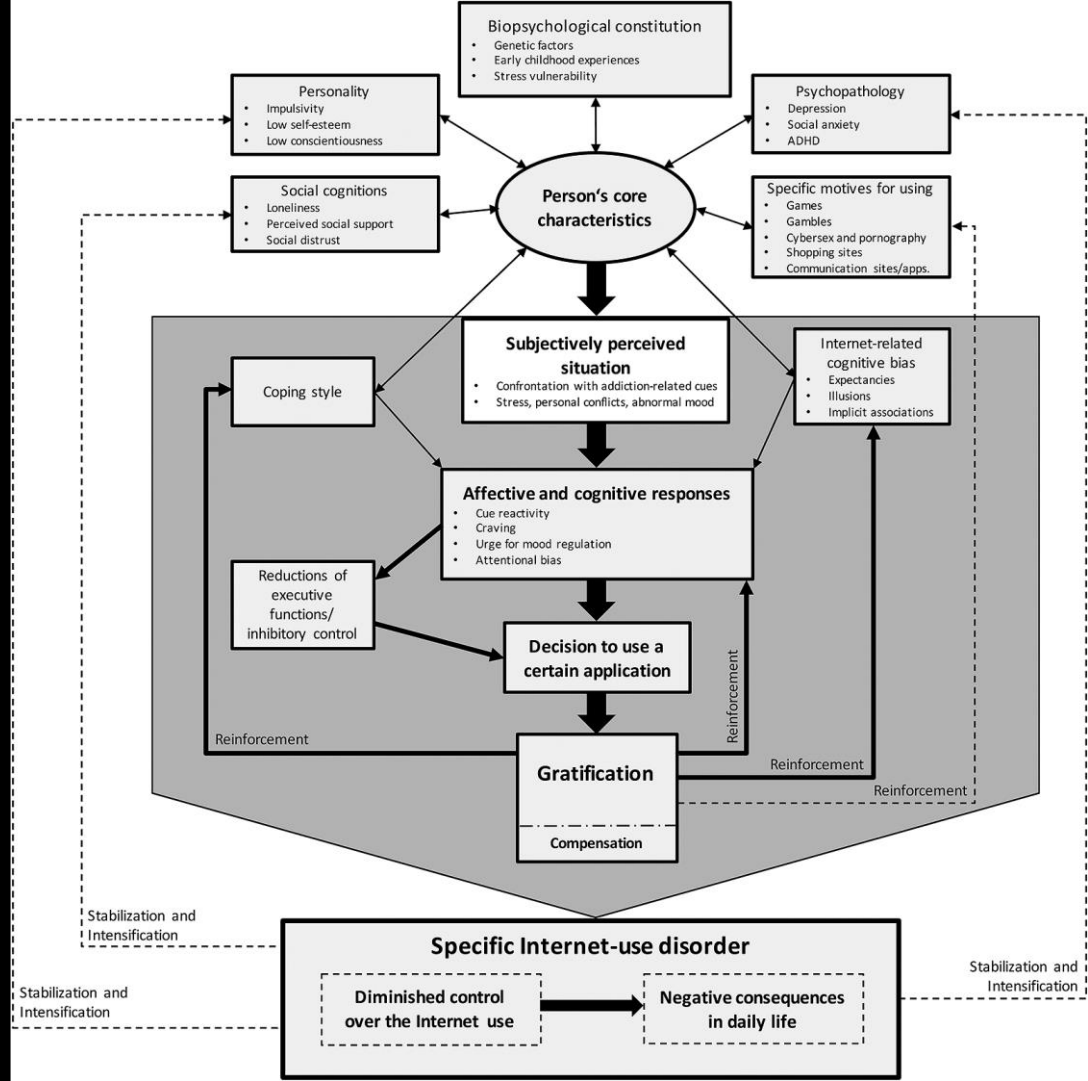


# I-PACE

## Interaction of Person-Affect-Cognition-Execution

Developed to understand the nature of specific internet-use disorders (e.g. online gambling, pornography, shopping, gaming etc.).

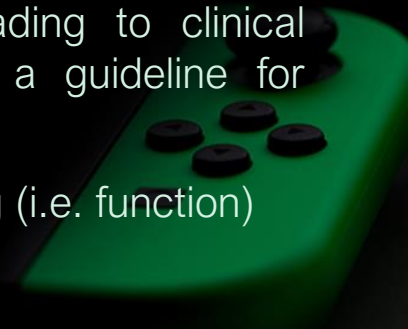
The disorders are the product of an interaction between predisposing-, moderating-, mediating-factors, reduced executive functioning, with contextual triggers.





# Assessment

- Dozens of self-report measures available – but current debate around diagnostic criteria makes their use problematic as a diagnostic tool.
  - Not all measures include all IGD addiction indicators, and there is large variation in cut-off scores between normal and pathological levels of gaming
- A structured clinical interview may be the best form of assessment for impairment and distress
  - Recommendations for assessing pathological use of digital media among young people include history taking, gauging nature of problems leading to clinical attendance, and considering what constitutes ‘normal’ use as a guideline for comparison.
  - Also important to consider the motivation behind problematic gaming (i.e. function)



# Summary

- A consensus around diagnostic criteria for IGD is currently lacking
  - Consensus exists for lack of control over use, and use of gaming for ‘escape’
- At this point we can reasonably posit that pathological gaming serves at least two functions (based on accepted diagnostic criteria, risk factors, and outcomes)
  - Emotion regulation
  - A (self-reinforcing) substitute for offline social interaction
- Assessment of IGD should focus less on time spent gaming with more emphasis on what function the problematic behavior may be serving

