Internet Gaming Disorder Defined:

Internet Gaming Disorder (IGD) as defined by the DSM-V:

Repetitive use of Internet-based games, often with other players, that leads to significant issues with functioning. Five of the following criteria must be met within one year:

- Preoccupation or obsession with Internet games.
- Withdrawal symptoms when not playing Internet games.
- A build-up of tolerance–more time needs to be spent playing the games.
- The person has tried to stop or curb playing Internet games, but has failed to do so.
- The person has had a loss of interest in other life activities, such as hobbies.
- A person has had continued overuse of Internet games even with the knowledge of how much they impact a person's life.
- The person lied to others about his or her Internet game usage.
- The person uses Internet games to relieve <u>anxiety</u> or guilt—it's a way to escape.
- The person has lost or put at risk an opportunity or relationship because of Internet games.

*This definition includes all video games including ones on computer, mobile devices, and gaming consoles

What Can Make These Games So Addicting?

- * Admiration for prowess
- Role playing (fantasy)
- Endless play, real time
- No pause button
- Peer driven; pressure to play
- Time Intensive
- * Challenging, stimulating, fun
- ❖ Interesting storylines, graphics, and music
- ❖ Intermittent Reinforcement
- Social Reinforcement (competition, cooperation, social standing, friendships, community)
- Sexual/Romantic stimulation
- Fantasy Persona (sexy, God-like, etc)

- Disinhibition through anonymity
- Intellectual stimulation/challenge/ sense of accomplishment/fun
- Daily rewards and Operant Conditioning

Link to YouTube Video shown in presentation explaining operant conditioning in gaming: https://www.youtube.com/watch?v=tWtvrPTbQ_c

One Way Professionals Determine Addiction vs. Excessive Gaming:

- Salience—This occurs when online gaming becomes the most important activity in the person's life and dominates their thinking (preoccupations and cognitive distortions), feelings (cravings) and behavior (deterioration of functioning). For instance, even if the person is not actually gaming online they will be thinking about the next time that they will be.
- Mood modification—This refers to the emotions that people report as a result of engaging in online gaming and can be seen as a coping strategy (i.e. they experience an "buzz" or a "high" from getting 'their fix' of playing or even a tranquilizing feel of "escape" or "numbing").
- * Tolerance—This is the process where increasing amounts of online gaming are required to achieve the former mood modifying effects. This basically means that for someone engaged in online gaming, they gradually build up the amount of the time they spend online engaged in the behavior.
- * Withdrawal symptoms—These are the unpleasant feeling states and/or physical effects that occur when online gaming is discontinued or suddenly reduced (e.g., the shakes, moodiness, irritability, etc.).
- Conflict—This refers to the conflicts between the gamer and those around them (interpersonal conflict), conflicts with other activities (job, schoolwork, social life, hobbies and interests) or from within the individual themselves (feelings of loss of control) which are concerned with spending too much time engaged in online gaming.

Relapse—This is the tendency for repeated reversions to earlier patterns of online gaming to recur and for even the most extreme patterns typical of excessive online gaming be quickly restored after periods of abstinence or control.

Possible Negative Consequences to Excessive Gaming:

- Decrease in Limbic Resonance (capacity to develop and feel empathy)
- Effective Communication of Thoughts, Feelings and Needs
- External Boundaries
- Learning to Read Social Cues
- Handling Conflict
- Ability to self soothe
- Aggression (cyber bullying, class disruption, etc.)
- Lack of exercise, leading to poor posture, underdevelopment of musculature, weight problems, lack of desire for exercise
- Poor nutrition
- Eye, back and tendon strains
- Lack of fine motor skills leading to being developmentally delayed
- Obesity/Sedentary Lifestyle
- Sleep deprivation

Possible Positive Effects of Gaming:

Increased motor controls

- * Intellectual Stimulation
- Possible prosocial behaviors (learning leadership skills, teamwork, etc)
- New and convenient ways for people to connect socially (particularly crucial during the pandemic)

Technology Guideline provided by the American Academy of Pediatrics (note this was pre pandemic and not considered to be an extremely conservative guideline):

| Developmental Age | How Much? | Non-violent TV | Hand-held devices | Non-violent video games | Violent video games | Online violent video games |
|----------------------|-------------|-------------------|----------------------|----------------------------|------------------------|----------------------------------|
| 0-2 years | none | never | never | never | never | never |
| 3-5 years | 1 hour/day | OK | never | never | never | never |
| 6-12 years | 2 hours/day | OK | never | never | never | never |
| 13-18 years | 2 hours/day | OK | OK | limit to 30 minutes/day | | never |

Gambling in Video Games: Micro Transactions vs. Loot Boxes:

Micro Transactions: Micro transactions in games allow players to spend real currency in order to obtain additional content such as power ups, new character costumes, and the ability to clear levels with minimal effort. These transactions are found in many games but are most common in mobile games that are initially free to play but eventually require additional items to continue to play



Loot Boxes: Loot Boxes are in game reward systems that can be purchased with real currency and provide a randomized reward. These loot boxes have been psychologically related to slot machines (low risk of reward/no skill required). Loot boxes have been outlawed in certain countries (Such as Belgium and The Netherlands) as it has been determined it is a legal form of predatory gambling for minors. They currently do not meet the US legal definition of gambling. There are websites where a player can outright sell their randomized reward to the highest bidder.



Tips for Parents:

- Become familiar with the culture in order to validate: Learn what games your children are playing, learn the language and the culture of the game. Doing this helps you set more realistic expectations such as stating they have time for two matches instead of 20 more minutes. Understand if the game is online and if it is, learn if your child is playing with/speaking to people they do not know.
- **Communicate**: Clearly state the expectations and limitations to your child before they start playing to help decrease tantrums. Children will respond better to clear communication rather than

statements, for example instead of saying 'no more games tonight because I said so' try 'Games need to be turned off by 6:00 so we can have time off screen as well before bed'.

- **Behavioral Interventions**: Enforce consequences to inappropriate behavior while explaining your reasoning. For example: "There will be no more games for two days because based on your behavior you can't seem to handle them responsibly. We can try again in two days to see if you can play without being inappropriate.
- Seek Therapy When Needed: Excessive Gaming is often a sign of a different mental health issues such as depression, anxiety, anger, etc. If behaviors are out of control, seek therapy for your child to determine if there is a larger concern. The therapist does not need to specialize in gaming as you would be more treating the underlying cause.