Technology Addiction: Gaming, Social Media and Electronic Entertainment

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1984

IBM PC

1-2 phones per household

Steve Jobs “It is now 1984. It appears IBM wants it all”

LNW Research 1979-1984

Console TV with Pong
33 Years Later

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Teens’ Phone, Computer & Console Access

% of all teens who have or have access to the following:

- A desktop / laptop computer: 87%
- A gaming console: 81%
- A smartphone: 73%
- A tablet computer: 58%
- A basic cell phone: 30%


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Social Media and Teens

Social Media Usage Among American Youth (12-24)
base: 12-24-year-olds who currently ever use social networking sites/services

March 2015

<table>
<thead>
<tr>
<th>Platform</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>74%</td>
<td>80%</td>
</tr>
<tr>
<td>Instagram</td>
<td>59%</td>
<td>53%</td>
</tr>
<tr>
<td>Snapchat</td>
<td>57%</td>
<td>46%</td>
</tr>
<tr>
<td>Twitter</td>
<td>36%</td>
<td>32%</td>
</tr>
<tr>
<td>Vine</td>
<td>30%</td>
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<tr>
<td>Google+</td>
<td>34%</td>
<td>26%</td>
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<tr>
<td>Pinterest</td>
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<td>16%</td>
</tr>
<tr>
<td>Tumblr</td>
<td>22%</td>
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</tr>
<tr>
<td>WhatsApp</td>
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<tr>
<td>LinkedIn</td>
<td>7%</td>
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</tbody>
</table>

MarketingCharts.com | Data Source: Edison Research / Triton Digital

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Teenagers USA Screen Time 2015

Common Sense (2015)


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24/7 Media/Device Availability

With technology we are bringing boredom to the brink of extinction. Satisfying this with the immediate gratification of media consumption may have tragic consequences for mankind.
Make Love, not Warcraft
2002: My Introduction to Computer Addiction

• Coincidentally two 15 y/o males referred to me at the same time
• One attempted to strangle mother with power cord when she unplugged the computer to get him off
• Other had not been attending school for 3 months
• No prior history of mental illness or behavior problems
  • Teens denied addiction and were resistant to counseling
  • Both eventually placed on involuntary psychiatric holds.
  • Cycles of abstinence, behavior contracting did not help cure the addiction or motivate positive change
  • Attempts to help parents reestablish parental authority failed
• Limited success with these clients led me to search for effective treatment methods.
Computer Addiction Research / Press

• Very little research, some sensationalized press
• Controversial since 1989 - does it really exist?
  • Symptom of other disorders or distinct disorder?
  • Blame? - Game Developers vs. Parents
  • Addictive Personality (blames genetics)
  • Behavior addictions? Most problematic uses, computer is simply the vehicle (sexual, email/chat, gambling)
• Prevalence - wild estimates (i.e. 40% of gamers)
• Diagnosis - protocols borrowed from gambling or SA
• Treatment - No standard of care
I have tried to quit the game but was unsuccessful.

N male = 2760, N female = 406

Percentage of Respondents

Age Ranges

Yee, 2002
Survey of Mental Health Professionals Exposure to Problematic Computer Use

- 5000 MD, Psych, MFT (229 responses)
- How many clients seen, what age groups
  - Clinicians saw 3 clients/yr., avg, 0.66 (11-17)
- What problematic uses seen (by age group)
- How diagnosed? Successful treatment methods
- Did they see this as a distinct disorder
- Did they know someone personally with the problem
  - On average, 50% knew someone personally
## Problematic Uses by Age Group

<table>
<thead>
<tr>
<th>Activity</th>
<th>Age 11-17</th>
<th>Age 18-25</th>
<th>Age 26+</th>
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<tbody>
<tr>
<td>Games</td>
<td>41%</td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td>Chat</td>
<td>34%</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>Sexual</td>
<td>25%</td>
<td>32%</td>
<td>54%</td>
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<tr>
<td>Online Relations</td>
<td>23%</td>
<td>28%</td>
<td>32%</td>
</tr>
<tr>
<td>Web Surfing</td>
<td>11%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Gambling</td>
<td>0%</td>
<td>4%</td>
<td>13%</td>
</tr>
<tr>
<td>Shopping</td>
<td>0%</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>Programming</td>
<td>0%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>
"Do you believe computer/Internet addiction is a distinct disorder”

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>No</th>
<th>Yes</th>
<th>Can be</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated</td>
<td>28</td>
<td>19</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Not Treated</td>
<td>44</td>
<td>15</td>
<td>15</td>
<td>26</td>
</tr>
</tbody>
</table>
Computer Addiction Treatment Methods

- Psychotherapy (CBT) - (45%)
- Family / marital Counseling (34%)
- Behavior Therapy (33%)
- Medication (32%) 11% respondents were psychiatrists
- Abstinence - take away the computer or game (18%)
- 12 step programs, on-line, gameaholics anon (18%)
- Controlled Use (moderation) (17%)
- Parent Counseling (15%)
- Social Skills Training (12%)
- Addiction Counseling (11%)
- Control / Monitoring Software - (8%)
Iowa State University
National Institute of Media and the Family
Survey of Video Game Play (2009)

• Nationwide Harris Poll Online survey
• Sample of 1178 youth 8-18 years of age
• 11 Questions Similar to Criteria for Pathological Gambling:
  • Negative Consequences of Play
  • Avoiding important academic, occupational or social responsibilities
  • Problematic behaviors as a result of play
• 8.5% of respondents met 6 or more criteria
• Pathological use correlated to 25 hours/week of play
Problematic Internet Research: 2017

- Majority of technology addiction research from Asia
- Two Distinct Problems: Gaming vs. Social Networking
- Gaming Addiction much better researched: prevalence: US/Europe 1.5%-8.2% of gamers in the US, higher in Asia
- Social Networking research very limited and conflicting
  - 24% of youth constantly on the internet
  - No agreed upon definition or criteria as a mental illness
- New Term: “Internet Attachment”
  - >Attachment = > Mental health problems
- Publication: Cyberpsychology, Behavior, and Social Networking
- No high quality clinical treatment outcome studies
Problematic Internet Use and Problematic Online Gaming Are Not the Same: Findings from a Large Nationally Representative Adolescent Sample (2014)

Orsolya Kiraly, MA, Mark D. Griffiths, PhD, Robert Urban, PhD, Judit Farkas, MA, Gyongyi Kokonyei, PhD, Zsuzsanna Elekes, DSc, Domokos Tamas, MA, and Zsolt Demetrovics, PhD

- National sample in Hungary
- Problematic Internet Use
  - Social Media/Networking
- Problematic Online Gaming
  - Smaller sample, predominantly male
- PIU only – 8.8%, POG only – 4.3%, Both – 6.7%
- Depressive symptoms associated with both types, PIU more
Problematic Internet Use and Depression

Depressive Symptoms and Problematic Internet Use Among Adolescents: Analysis of the Longitudinal Relationships from the Cognitive–Behavioral Model

Manuel Gamez-Guadix, PhD (2014)

- Negative outcomes at an academic, family or social level due to problematic internet use predicted depression 1 year later
- Depressive symptoms at time 1 predicted problematic internet use with negative outcomes one year later
Hooked on Facebook: 
The Role of Social Anxiety and Need for Social Assurance in Problematic Use of Facebook
Roselyn J. Lee-Won, PhD, Leo Herzog, BA, and Sung Gwan Park, PhD (2015)

The Facebook Experiment: Quitting Facebook Leads to Higher Levels of Well-Being
Tromholt, Morten, MSc (2016)

Exploring the Role of Parents and Peers in Young Adolescents’ Risk Taking on Social Networking Sites
Wonsun Shin, PhD, and Nurzali Ismail, ME (2014)

Instagram #Instasad?: Exploring Associations Among Instagram Use, Depressive Symptoms, Negative Social Comparison, and Strangers Followed
Katerina Lup, MA, Leora Trub, PhD, and Lisa Rosenthal, PhD (2015)
Industries Drive Consumption: Gaming

- Gaming >$111B Sales Worldwide (2015), >$20B US
  - Annual US HH spending $60
  - Growing at 9-18% annually
  - Huge growth in Mobile gaming industry
  - Surpassing other forms of entertainment
  - eSports now a legitimate form of entertainment
Industries Drive Consumption: SN

Social Networking Becoming THE Dominant Marketing Industry

SmartInsights.com (2017)
Research Summary

• Gaming and Social Media problematic uses distinct
  • Gaming longer/better researched
  • YouTube, Twitch media use extensions of gaming
  • Other Media consumption not researched
• Both predict increased Depression and Anxiety (males)
• Internet Gaming Disorder – affects 2-15% of youth
  • Defined mental disorder in China, South Korea
  • Online Role Playing Games most implicated
  • China/South Korea (15%), US – likely >8%
  • Negative life outcomes correlate to >25 hours /week
• Social Networking excesses lead to elevated risk of depression, anxiety and cyber bullying

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Last 15 years: My Experience

- Problematic technology use has been getting worse
  - Smartphone dependence affecting younger users
- Under reported as a clinical problem <10% treated
- Anxiety / other disorders cited for school refusal/failure
  - Significant psychiatric holds related to the problem
  - Females almost never treated
  - Schools/institutions/healthcare professionals complicit in the “up the stairway to failure” dilemma
- Few clinicians specialize in treating it
Common Symptoms Observed

- Lies or in denial about extent of use - (claims 20, actual 60+ hours)
- Stays up late, sneaks game play in the middle of the night
- Steals money to purchase items in game
- Often has trouble getting to school or college – claims anxiety
- Has become isolated, withdrawn from real world friends
- Previously an honor student, now failing classes
- Constant arguments with family member regarding use
- Lack of interest/motivation in anything but gaming
- Repetitive stress injuries, unusual weight gain/loss
- Does not believe there is a problem – if others would leave alone
- Admits playing helps improve mood, often irritable otherwise
- Thinks about playing many times a day, everyday
- Many failed attempts by parents to limit use, removal of computer
Internet Gaming Disorder

APA Proposed Diagnostic Criteria - DSM-5

Persistent and recurrent use of the Internet to engage in games, often with other players, leading to clinically significant impairment or distress as indicated by five (or more) of the following in a 12-month period:

• Preoccupation with Internet games. (The individual thinks about previous gaming activity or anticipates playing the next game; Internet gaming becomes the dominant activity in daily life).
• Withdrawal symptoms when Internet gaming is taken away. (These symptoms are typically described as irritability, anxiety, or sadness, but there are no physical signs of pharmacological withdrawal.)
• Tolerance—the need to spend increasing amounts of time engaged in Internet games.
• Unsuccessful attempts to control the participation in Internet games.
• Loss of interests in previous hobbies and entertainment as a result of, and with the exception of, Internet games.
• Continued excessive use of Internet games despite knowledge of psychosocial problems.
• Has deceived family members, therapists, or others regarding the amount of Internet gaming.
• Use of Internet games to escape or relieve a negative mood (e.g., feelings of helplessness, guilt, anxiety).
• Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of participation in Internet games.
How Does One Become Addicted? Patterns

- Increasing game play, starts with a few hours, evolves to most if not all available free time (>35 hours / week)
  - Baby sitter, low cost entertainment
  - “At least he is not going out and getting into trouble”
- Increasing social and team involvement and responsibility to team members - > play, > rewards (loot)
  - i.e. Raids, increasing participation points
- Weekend play binges - 12hrs+ / day
- Decreasing real life social involvement
  - Play commitments often 7 days a week
- Increasing effort made to manage lifestyle
  - Do minimum in school, sports, work, etc.
  - Work around parental controls
Is this a Parenting Problem?

• Yes and No. Adults can become addicted however...
• Technological Divide makes parents vulnerable
  • “I know he spends too much time gaming but he is a
    computer genius - it will help his future career.”
• Relatives, friends have lots of advice - they tell parents:
  “Just take away the computer!” , Why can’t you control
  your kid? , Just tell him to knock it off!
  • Shame prevents parents from seeking professional help
• Parents have no experience in dealing with an addicted
  (previously compliant) child: lies, denial, sneaking around
• Rationalization - “At least he is not using drugs”
• Professional advice can be conflicting and confusing
Attempts at Controlling Excesses

- Child Abuses Computer
  - Parents remove keyboard/mouse/power cord/router or install parental control software
  - Child’s obtains hardware or defeats parental control software
    - Period of escalating anger, poor school performance, sleep issues
    - Child challenged to find covert solution to bypass control

Options:
1. Parents give up
2. Remove computer from home
3. Seek professional tx
Abstinence / Relapse Cycle

Repeated cycles damage relationship

Child Abuses Computer

Parents remove computer/game from home

Child’s attitude improves

Parents return computer to home

Period of escalating anger, poor school performance, sleep issues

Period of child working to get computer back

Options:
1. Give up
2. Remove computer longer term
3. Seek professional tx
Parent-Adolescent Power Struggle

Period of escalating anger, poor school performance, sleep issues. Parents finally have had enough! Sometimes this is encouraged by mental health professionals.

Period of parents and child locked in power struggle

Options:
1. Give up
2. Seek (new) professional tx
3. Send child to RTC
Media Addiction Treatment Methods 2017

- Outpatient Psychotherapy
- Medication
- 12 Step online – OLGA, Olganon
- Wilderness Programs
- Inpatient/Residential
Outpatient Therapy

• Most common
  • Checkbox “specialization” on Psychology Today
• Limited number of therapists with dedicated practice
• No DSM Diagnosis, No standard of care
• Mostly weekly talk therapy, parent counseling
  • Unmotivated adolescents, young adults
  • Often initiated after psychiatric hospitalization/violence
• Effective treatment?
  • Weekly talk therapy alone mostly ineffective
Medication

• Antidepressants most commonly prescribed
  • Zoloft, Prozac
• Low dose antipsychotics for angry outbursts
  • Abilify
• Anxiolytics prescribed for anxiety reported based on school avoidance (troubling)
  • Xanax, Klonopin
• Less than 25% of my clients on medication
12 – Step Programs - Online

- On-Line Gamers Anonymous - OLGA
- OLG-Anon
- Meets individuals where they are – online!
- Chat and Forums
- Support and Encouragement
- Professional/other Resources
Wilderness Programs

- Technology free
- Back to nature
- Outdoor Enrichment
  - Adventure
  - Challenge
- Parental relief
- Individual, group counseling
- Group/team engagement
- Less expensive than inpatient
- Deviant peer influence risk
- Aftercare?

“I’M LEARNING HOW TO UTILIZE MY STRENGTHS-
I have finally found myself again.”

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reStart Treatment Program

• Technology Detox
  • No technology (gaming, cell phones, internet)
  • Limited telephone/television
• Individual, Group Therapy
• Life Skills training
• Enrichment activities
  • Sports, outdoor activities, community service
• Mindfulness, Meditation
• Lifestyle Planning
  • Treatment goal is moderation
• Wellness Center Model
Inpatient: reStart Program
Treatment: The Science of Addiction

Brain reward (dopamine) pathways

These brain circuits are important for natural rewards such as food, music, and art.
Sufficient Activation Results in Addiction

Brain reward (dopamine) pathways

Frontal Cortex
Ventral Tegmental Area
Nucleus Accumbens

These brain circuits are important for natural rewards such as food, music, and art.
Gaming Implicated as a Behavioral Addiction

• Experiencing rewards of game play causes significant activation of the reward pathway - PET, fMRI scans observed
• Games are designed to be addicting (“compelling”)
  • Behavioral psychology used - reinforcement schedules
  • Subscription model - no end to play – they go on forever
• Adolescents, young adults sensitive to reward system stimulus with significant brain development
  • Mastery, Success Identity, Autonomy Needs vulnerability
• Hours, hours of play time = significant reward center activation
• Large number of individuals self-report being addicted
• Parents/significant others come to treatment 100% convinced
Theory of Computer Gaming Addiction:

- An individual becomes addicted to computer/video gaming (or other media/devices) when, as a result of use, sufficient rewards are applied in sufficient quantity through a sufficient schedule of reinforcement.

- This theory considers that a net combination of individual differences (genetics, developmental characteristics and life experiences), competing/complementary reward systems within the individual’s environment and the net effects of the game’s reward system will determine who gets addicted and who does not.

- Similar to other addictions, we assume relationships between the risk of addiction and 1) amount of play (> play = > risk), 2) age of onset of play (< age of onset = > risk) and 3) game design qualities (> reward system, > risk)
Real-life Rewards Fade to Gray
Range of Pleasure Perception Narrows
(conceptual)

- Max
- Min

Drugs of Addiction
Sexual Ecstasy
Video Gaming
Academic/Occupational
Sports, Exercise
Socializing, Relationships
Watching a Sunset
Recall /Anticipate
Pleasurable Event

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Vicious Cycle of Addiction/Dependence

1. Negative Mood States (Anxiety, Depression, Boredom)

2. Excess Media Consumption

3. Negative Real-life Outcomes (Family Relationships, School Failure)
Treatment Model Based on Science of Addiction

• Addiction is a disease where the reward pathway has been hijacked
  • Repeated application of the rewarding behavior

• Treatment involves NEW learning, not merely discontinuance
  • No unlearning - Memory and learning accomplished through neural connections. Connections may fade but are not undone
  • New learning (connections) mediate and supplant old information. “Extinction” - \textit{Abstinence alone does not cure addiction!}
    • AA, NA - new meaning in life, higher power, helping others
    • Block substance’s effect on the reward system (Naltrexone)
    • Reduce the rewards of game play?
      • Drug to block natural rewards to cure behavioral addictions?
Reward Pathway Guides Behavior

Addictive Behaviors
- Gambling
- Computer/Video Gaming
- Eating/food
- Shopping
- Sexual

Sum of Learning
- Reward Pathway

Life’s Rewards
- Academics
- Athletics
- Career
- Relationships
- Success
- Spirituality

Pleasure
- Novelty
- Reinforcement
- Meaning

TREATMENT

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Implications for Treatment: Reducing the Rewards of Gaming

• Cannot directly change the game’s reward system, but indirectly we can lower the rewards by reducing the amount of game play:
  • Individual and Team Ranking Declines
  • Participation points - more you play, greater loot
    • Modest reduction dramatically reduces opportunity to gain rewards and status within guild
  • Social rewards
    • Reduction in available computer time = significant reduction in available pre and post activity socializing
• For some this is sufficient for treatment
Vicious Cycle of Addiction/Dependence

1. **Negative Mood States (Anxiety, Depression, Boredom)**

2. **Excess Media Consumption**

   - **Negative Real-life Outcomes**
Negative Mood States

1. Psychotherapy, Medication, Physical Activity

Excess Media Consumption

2. Consistent daily Usage limits to “safe” levels

Negative Real-life Outcomes

Enrichment activities Family Involvement
Harm Reduction Treatment Model

Addict Uses Computer

Use is limited each day

Addict is frustrated or angry about limits. Has extra free time to pursue other activities.

Reduce amount of ALL computer time according to agreed upon limits on a daily basis.

Addict learns to have feelings of frustration cravings, while accruing significant real-life rewards

- Reduce gaming rewards through reduction of game play time
  - Rate of reduction and end use limits based on individual’s goals
  - Reduces chance of serious abreaction, depression, self-harm
- Psychotherapy to gain mindfulness and acceptance skills
- Enrichment activities to increase real-life rewards
Outpatient Treatment – Lake Forest, California
- Psychotherapy and parent couching

Inpatient Adult Residential – Big Bear, California
- 5 day retreat – kick start treatment
Outpatient Treatment

• Model based on Science of Addiction and > 10 yrs. experience
• Identified that reduction in gaming time applied over a sufficient amount of time helps moderate use even after limits are removed
• The use of Acceptance and Commitment Therapy (ACT):
  • Easy to understand and accepted by clients
  • Addresses many of the skills, developmental deficits
• Found the early involvement of parents/significant others reduced dropout, improved motivation for treatment
• Goals for treatment should be chosen by the client and be realistic: game abstinence or moderated use
• Coaching parents and counseling clients at the same time difficult but not impossible

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Short Term Adult Residential Treatment

Opening Spring 2017

• Treatment facility in Big Bear, California
  • Remote location surrounded by a nature preserve
• Extended weekend (3-5 day) format
  • Intake Assessment, Treatment Planning
  • Technology Detox period followed by moderated gaming/technology use
  • Light Outdoor Adventure Activities
  • Life skills, individual and group therapy
  • Family involvement at start and end of stay
• Aftercare: Home structure coaching
  • Local psychotherapy and medical care
Treatment Protocol Overview

• Intake Assessment
  • Assess impairment and lifestyle conflicts
  • Develop rapport with all family members
  • Educate on therapy and addiction
  • Establish treatment goals

• Early Sessions
  • Agree upon usage limits/goals
  • Socialize to individual and family psychotherapy
  • ACT psychotherapy as skills building, coaching
  • Refer out for medication evaluation

• Ongoing
  • Individual and family therapy
Outpatient Treatment Protocol: Intake Assessment

- Assess the problem – questionnaires, interviews (2 hours)
  - Include parents/significant others if possible/necessary
  - Identify the negative impact on health, academic, occupational and social domains (Motivational Interviewing)
  - Identify the impact on the family/couple
  - Assess for related mental health issues
    - Depression, anxiety, system, developmental delays, other
  - Identify the amount and times of play AND pseudo-play

<table>
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<th>Hours/week</th>
<th>Impairment</th>
</tr>
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<tbody>
<tr>
<td>5 - 15</td>
<td>Not addicted</td>
</tr>
<tr>
<td>15 - 25</td>
<td>Likely Addicted</td>
</tr>
<tr>
<td>25 - 35</td>
<td>Addicted</td>
</tr>
<tr>
<td>35 - 45</td>
<td>Serious Impairment</td>
</tr>
<tr>
<td>45 - 55</td>
<td>Serious Impairment</td>
</tr>
<tr>
<td>55 - 65</td>
<td>Serious Impairment</td>
</tr>
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Outpatient Treatment Protocol: Intake Assessment (continued)

- Provide a tentative, limited diagnosis
- Brief psycho-education
  - Science of Addiction, game culture, treatment methods
  - “Never pull plug on game play”
- Discuss goals for treatment
  - Ask both parents/spouse and addict separately:
    - “What do you think is a reasonable amount of time?”
    - “What important responsibilities have suffered as a result of gaming?”
    - Abstinence or moderation?
  - Negotiate to starting point - how much and when each day
  - Discuss reasonable expectations for parents/significant others
- Develop the treatment plan
  - Educate client and family, seek buy-in from client
  - Contract for specific number of sessions
How to Classify and Code?

• No Gaming Addiction Dx or ICD Code
• Common Gaming Dependent Specific
  • Diagnosis DSM-IV / ICD-9
    • Impulse Control NOS 312.30
  • Diagnosis ICD-10 Adult
    • Other impulse disorders F63.89, Impulse disorder, unspecified  F63.9
  • Diagnosis ICD-10 Children/Adolescents
    • F98.9 Unspecified behavioral and emotional disorders with onset usually occurring in childhood and adolescence
• ICD9/10 Mood, developmental, behavioral, etc.
Outpatient Treatment Protocol: Behavioral Structuring

- Help parents create a life structure encouraging real world success:
  - **Reduce** the amount of play time to safe **agreed upon levels**:
    - Children/younger teens – limit setting parental controls/software. Adults – allow attempts at self monitoring/limiting first, then strong limit setting tools if not successful
      - Reduces the indirect reward from play
      - Reduces the amount of pseudo-play time
      - Reduces social rewards from game play
      - Increases sleep, available “free” time, positive health impact
  - **Gradual or rapid decrease as needed/ deemed safe**
Outpatient Treatment Protocol: Behavioral Structuring (continued)

• Create enrichment opportunities for life rewards
  • Increase positive, pro-social activities and rewards
    • Career, academic coaching, values exploration
    • Improvements in school, work, relationships = greater satisfaction
    • Academic counseling, career guidance, life goal setting
    • Coaching parents/significant others

• Behavioral Contracting
  • Use computer time as reward for participation in competing activities
  • Sports, extracurricular, social activities
Reliable Limit Setting

• Consolidate all gaming/media use to one DESKTOP system
  • Other user’s computers/tablets/smartphones must be secured (password protected, locked away)
  • Client’s laptop(s) must be removed
    • Allows secretive use and use in bed, bathroom, etc.
  • Client’s other devices - Ipad, Ipod, IPhone must be removed
    • No more Tablets, Smartphones (at home, at least)
    • Gaming Consoles must be removed
  • If possible move desktop system into a common area
• For adults, allow attempt to self regulate other devices first then negotiate giving up other devices
• Install/configure limit setting tool on Desktop System
  • Set to agreed upon limits if user cannot self-limit (definition of addiction)
Limit Setting Tools

- Parental Controls for the Game or Application
  - Limits application time (i.e. World of Warcraft)
  - Playstation, XBOX and other consoles
  - Limited to application (pseudo play?)
- Router Control Applications
- Parental Control Software with Time Limit Features
  - Parents must be System Administrator, potential for hacking
- Windows 8/10 and Mac OS allow when and daily limit settings
  - Parents/Significant Others are System Administrators
- Self-Limiting Software Tools/Apps provide feedback
  - Rescue Time, Stop Procrastinating
- If not tech-savvy, partner with technical resource provider
WIFI Router Controls

• Simple Controls: Use 2 WIFI routers
  • One with a AC power timer, one on 24/7
  • Different router SSID and passcodes
• Complex Controls: MAC filtering and control
  • Router settings to allow time limits and access specific to WIFI enabled devices
• WIFI Router Must be located in a locked, secure room
  • If they have access to the router or times they can disable
• Make sure your neighbor’s WIFI Routers are secure
• Still operate devices without WIFI?
Limit Setting Difficulties

• What helped cause the problem in the first place
  • Poor monitoring, Family/marital issues - differences
  • Parental mood disorder, ADHD, crisis
  • Lack of computer knowledge and subject to manipulation
  • Unable to tolerate an upset, angry child / young adult
  • Unreasonable expectations
    • “Child is old enough to monitor themselves!”

• Technical Limitations
  • Motivated Tech Savvy Addict
    • Reinstall OS or Windows OS on a USB Stick Drive
  • Security limits of hardware and applications
    • Many backdoor ways of bypassing security
Parenting Struggle

- Overcoming strong negative feelings
  - Able to tolerate an upset, angry child / young adult
- Overcoming child manipulation
  - I need to install a program
- Dealing with parental thoughts “this is ridiculous”
  - Temptation to give up - send child to inpatient treatment
  - Treatment is counterintuitive to just taking away computer
- Guilt, fear of being considered a bad parent
  - Why did I let it get like this?”
- Marital conflict - parenting style conflict creating obstacles
  - Permissive vs. High Control
  - Anger, resentment from past conflicts
Computer Addiction Treatment Device
PC Moderator™ (2005)

- For adults or difficult cases with tech savvy / defiant addicts
  - Locks on, cannot be removed even by opening computer case.
  - Feature set specifically designed to aid clinician/parents
    - Records amount of time used, by day: reports
    - Limits set for when and for how long computer can be used
    - Taper down schedule automates limit changes
    - Setup can be done prior to installation
- No longer available for sale
Sentinel Gaming Systems™
High Performance Remotely Managed Gaming Computer

• Full Performance Gaming Desktop
  • Up to Intel I7 CPU, Windows 10 OS
  • VR, 4K ready

• Remotely Configurable / Managed
  • Hardware imposed operating limits - independent of OS
  • Users may remain System Administrator of the computer system
  • Web based controls can be operated from anywhere with internet
    • View current status, screen, modify limits in real time
  • Usage settings for when and how long users allowed on the system
    • Gaming Mode, Study Mode, No Video Modes, GamePlay+™
    • Daily settings, holiday, taper down schedules

• Highly Secure – Tamper and Hack Resistant
  • If hardware tampered, unit will no longer operate, email alerts
Mobile Device Parental Controls

• Carrier Based
  • Cannot be defeated by child
  • Only can control what the carrier provides
  • Limited usefulness if WIFI available
    • Data based applications for voice, text, Social Media
  • Free or monthly fees (varies by carrier)

• Application Based
  • Installed app
  • Android “Uninstall protection” prevents removing app
    • Factory Reset Protection – Android Lolipop+
  • Apple products provide remote notification of uninstall
  • Features and support vary by product
Mobile Monitoring Apps

• MMGuardian (http://www.mmguardian.com/)
  • Time limits, location, text messages, browser history
  • Web filtering and blocking

• TeenSafe (http://www.teensafe.com)
  • Monitors location, text messages, browser history
  • 3rd party apps: WhatsApp, Kik

• VISR (http://visr.co)
  • When you want to afford your child privacy
    • Reports only activity to parents
    • No direct control over usage
Implications to Consider for Treatment:

• Gaming may be greatest single motivator in person’s life:
  • If possible, make play contingent on completing other day-to-day responsibilities and non-play activities
  • Start slow and increase non-game activities over time

• Stop complementary rewards
  • Magazine subscriptions, new computer equipment, etc.

• Competing responsibilities/activities should offer their own rewards:
  • Social, academic, employment, athletic, artistic

• Behavioral interventions have face validity for treatment
  • Game play is a behavioral intervention
Tip the Scales toward Real World Rewards

• Use assessment to identify areas needing help
  • Academic, social, family relations, etc.
• Parents / Significant Others must work aggressively
  • Encourage a success identity- real life rewards
  • Work to improve family relationships - quality time
• Parents / Significant Others must be patient
  • Withdrawal can be minimized, however irritability, depression, anxiety are possible issues to emerge
  • Game rewards have overtaken real life rewards - it will take time for new learning
• Parents / Significant Others must be consistent
  • Stick with behavioral interventions to the letter
  • Clear message to child / significant other
• Seek additional professional help as needed
  • Parents may need technical help
Life Balance Worksheet

Recommended Changes to
Balance Life’s Rewards
For

---

TV, Internet and Computer/Video Gaming

Real-life rewards

List Media Interests

---

Academics / Education
Athletics / Exercise
Career Goals and Success
Close Friendships
Family Relationships
Financial Success
Other Hobbies and Interests
Romantic Relationships
Spirituality / Philosophy
Travel

Key:
+ increase
- decrease
x remove
* no change

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Case Study - 17 years old

- 17 y/o male WOW Addiction
- Declining / failing grades
- School refusal began after demand for improvements
  - Parent: “2 weeks of attending school and doing h/w, get computer back”
  - Child: “Give me back computer or I won’t go to school
  - 30 days later… still not in school
- Setup PC Moderator with computer time allowed for attending school, even part day
  - 1 hour school = 1/2 hour computer time
- Back in school full time within 1 week
  - Limits set to daily (2 hours) and weekend (5 hours) use and contingent on doing h/w each weekday
Case Study - 19 years old

• 19 y/o male WOW addiction, 91 hrs/week maximum
• Failed college
  • Attended 1 year at local university, dropped out moved home.
  • Failing first term at local community college
• Set conditions for continued financial support by parents
  • PC Moderator on computer
    • Parents were “custodians” of the device
    • PC Moderator helped with denial and negotiated limits
  • Reasonable use limits 3 hrs./day + weekend = 25 hrs./week
  • Attend local college, successfully passing courses
• Enrolled in college, passed first courses, got job and was successful at balancing work, school and fun within 4 months
Going Forward: Prevention and Early Intervention

- Parent education
  - Parent handouts, parent meeting and technology education
    - Limit daily use, use built-in parental controls where possible
- School / Education at-risk identification
  - Middle, high school and college/university
    - At-risk evaluation
  - Educators, school counselors and Ed consultants
- Health professionals
  - Primary care physicians, psychiatry, psychology, MFT/counselors
  - Agreed upon assessment (DSM V?) and validated treatment methods
- Gaming industry - promote responsible entertainment
Questions?
Credits / References / Resources

• DSM-5 (2013) American Psychiatric Association
Credits / References / Resources

• Smart Insights (2017) Global Social Media Research Summary
• Southpark - Comedy Central, Season 10, “Make Love, Not Warcraft”
  http://www.pcm moderator.com/wooglabs3_018.htm
• Yee, N. (2002) Ariadne - Understanding MMORPG Addiction, retrieved from
  http://www.nickyee.com/hub/addiction/home.html
Computer Addiction Treatment Programs (US)

David Greenfield, Ph.D. - The Center for Internet and Technology Addiction
West Hartford, CT 06119
860-561-8727

Hillarie Cash, Ph.D. - Internet/Computer Addiction Services
Redmond, WA. 98052, (425) 861-5504

Kenneth Woog, Psy.D. - Computer Addiction Treatment Program
Lake Forest, Ca 92630, (949) 422-4120

Kimberly Young, Ph.D. - Center for Internet Addiction Recovery
Bradford, PA 16701
814-451-2405