Amanda Zimmer
East Greenwich, Rhode Island
December 9th, 2025

Chairman Grassley, Ranking Member Durbin, and Distinguished Members of the Committee:

Thank you for the opportunity to submit this testimony for the record regarding the protection of children online.

My name is Amanda Zimmer, and I am a mother from Rhode Island. I write to you not as an expert in technology or law, but as a parent who has experienced an unthinkable tragedy that no family should ever have to endure. I am here to be a voice for my son Owen, who can no longer not speak for himself, and to support countless other families living with the unique and never ending pain that comes with the loss of a child due to online harms. Online harms that could and should have been avoidable.

Owen was a bright child with a natural gift for electronics and technology. His grandfather was an electrical engineer, and they shared a passion for building and creating things. Over the years, they completed several engineering projects, including building a gaming computer when Owen was in middle school. These were some of Owen and his now also deceased grandfather's happiest times together — working together and bringing ideas to life.

I never saw technology as something inherently dangerous. My father used technology to help design the landing gear for the Space Shuttle, as well as the IED detection capabilities that protect our deployed service members. I grew up with an appreciation of the positive things technology could do when handled responsibly and a human-first purpose.

Owen had a smartphone, a PC, and a gaming system in elementary school. As Owen grew, so did the proliferation of platforms and what those platforms offered. He was an avid gamer, and followed and idolized Minecraft "YouTubers" like so many children did at the time. He eventually also started using Discord, Steam, Instagram, TikKok, etc. What I didn't understand then was how these platforms were affecting Owen's sleep, emotions, as well as thinking and cognition.

In fact, in recently unsealed court documents, there are internal records from Google in which these very harms are discussed. The documents state that "Gaming content on YouTube is sought out by inappropriately aged children," that "gaming content is being watched by viewers who are underaged to actually play the game, and that "watching this game content can become addictive, as well." Google's own document conclude that "If DSM Criteria were applied to watching gaming videos, 1 in 5 teens would be diagnosed with

addiction." The internal Google study is dated 2018. I've attached a copy here, because it's a document every parent deserved to see in 2018. It contains information Google knew about the health and safety of our children, and we did not. And it tracks with the struggles my son began to have.

Fast forward to the Spring of 2021. Owen was 14, and he got into trouble at school. During COVID and remote and asynchronous learning, he and a small group of other kids figured out how to shut down the server of the local public high school they were attending. Owen took the blame for the incident, not providing the names of the other boys involved. He was expelled from school and faced multiple criminal charges.

Owen had always been shy and had social anxiety. He had pushed through these issues and pursued his dream of playing Quarterback on the High School's JV team. After being expelled and charged, however, he struggle to re-engage with high school. He became depressed and anxious. But then, he turned things around.

Owen opted to repeat his sophomore year at a local private school because he was concerned about his grades and getting into a good college. He was excited about school again, got back into sports, and participated in extracurricular activities. Owen started "Band Club" where he could play the drums and guitar and jam with other students, and he was selected as a "Nathan Hale Ambassador" for the school. He had a solid friend group and a girlfriend. He was working hard to succeed and rebuild his life.

But something was happening that I couldn't see. The social media platforms that claimed to be safe for children as young as 12 began to prey on my son. They began to exploit his vulnerability and insecurities and targeted Owen with incredible amounts of extremism, white supremacism, hate speech, and propaganda. The algorithms went for the kill. The more he engaged, the more they fed him these nightmares. They began targeting my son with intense suicide-promoting content, including massive amounts of videos and posts relating to "LooksMaxxing" and "RopeMaxxing." The connected him with individuals who made it their purpose to bully him and try to talk him into suicide. Non-stop, and without ever providing my son with tools to limit his use or otherwise protect himself from these harms.

On the morning of November 4, 2023, the day before his younger sister's 13th birthday, we found Owen dead, hanging in his closet.

Since Owen's death, I have learned things that no parent should have to discover about the last months of their child's life. Specifically, not understanding what had happened or what possibly could have happened, I began to investigate his social media accounts and devices. What I found would horrify any decent human being, and yet, what I know now, is

that these are the kinds of experiences social media platforms are aiming at children every single day.

The nightmares that these platforms were force feeding my son were not random. These harms were the direct result of AI-driven recommendation algorithms designed to maximize engagement at the expense of our children. These companies are designing and distributing their products in a manner meant to manipulate and to keep users on their platform as long as possible. Literally, around the clock, and despite knowing that this means there are millions of children going without time to focus on school, to socialize with others, and to sleep. They are stealing every minute of the day they can, without remorse whatsoever. That is, quite literally, their business plan.

No matter what Owen sought out and searched for, if the algorithm determined it could hook him by sending something else, then that is what it did. And it did this around the clock.

These products pushed him down a rabbit hole, and more importantly, these companies knew that their products were designed to do so. Citing to more documents recently filed in lawsuits across the country, Meta knows that its ranking algorithms push users into "rabbit holes." The following are just some examples of quotes from Meta's own documents,

- "someone feeling bad sees content that makes them feel bad, they engage with it, and then their IG is flooded with it")
- "if you start following borderline accounts or interacting with such content, our recommendations algorithms will start pushing you down a rabbit hole of more egregious content."
- "well-being challenges: … our ranking algorithms taking [users] into negative spirals & feedback loops that are hard to exit from."
- "people who are suffering from depression and self-harm go down IG rabbit holes, and explore functionality compounds this issue."
- "Once the young people start to self-injure, they tell us that their feed…on Instagram suddenly gets full of this content."

These are quotes from Meta's own documents.

TikTok likewise recognized that it could identify users caught in these cycles – cycles like the one that caught my son – and management's response was to "deprioritize[]" mitigation efforts. While Google conducted various studies in 2018, determining that "It is also known

that YouTube's algorithms are designed in a way to increase 'rabbit hole' watch time and 'keep people hooked on the screen' (Lewis, 2018)." Other Google documents acknowledged that "Recommender algorithms take advantage of multiple aspects of brain development as well as adolescents' less developed self-regulation."

And on and on and on. These companies know what they are doing to American children like my son, Owen, they simply have chosen to prioritize their profits over human life.

By design, they take what might start as typical teenage insecurity or curiosity and turn it into an avalanche of increasingly extreme content. These algorithms identified Owen as someone who would engage, and they exploited that vulnerability for profit. "LooksMaxxing" content, for example, preys on insecurities about appearance—and, in turn, may lead to "RopeMaxxing" content, which is a term used in online communities to discuss and promote suicide by hanging.

These platforms knew that Owen was a minor. They knew that he was being served suicide-promoting content and extremist material. Yet there was no intervention, no notification to his parents, no circuit breaker to stop the algorithmic radicalization of a vulnerable teenager.

I have also learned that Owen's experience is not unique. There are patterns here. Patterns of young people, particularly young men, being algorithmically pushed toward extremist ideologies and self-harm content. The platforms have the data. They know this is happening. But they have made a calculation that engagement and growth matter more than the lives of children.

Law enforcement has been unable to hold anyone accountable. The platforms claim protection under Section 230. They argue that they are merely hosting content, not actively pushing it to children. But that is fiction. These algorithms make active choices about what to show to whom. When an algorithm first addicts and then decides to recommend suicide content to a depressed teenage boy, that is not passive hosting. Those are the types of active choices that led to the death of my son.

I am not asking this Committee to ban technology or social media. Technology was something Owen loved. It was something that connected him to his grandfather, that allowed him to create and build and learn.

But what certain social media products have become is not about connection or creativity. These companies have designed their products to become engines of engagement that treat our children as data points to be analyzed and exploited and that no longer serve the public, but rather, treat the public as servants to these corporations. They take our data, without consent. And they use that data to push vulnerable young people toward

extremism and self-harm because they have learned that extremes can be effective at keeping growing brains scrolling.

This must change. Specifically:

These social media and AI platforms must be held accountable when their own design and programming decisions profile and push harm to minors. Section 230 was never intended to protect companies that take our data and use sophisticated artificial intelligence to push children toward suicide and extremism. There is a difference between passively hosting content and actively amplifying it to vulnerable users by design.

These social media and AI platforms must be required to design their algorithms and all of their products with child safety – and not engagement – as a primary consideration. In no other industry do we allow companies to purposefully prioritize profit over human life. Ford tried that with the Pinto, and we made it stop. Now we to do the same with these companies. This means requiring these companies to disclose the harms they know their products cause, the risks to the public so we can make informed choices; and it means safety features like circuit breakers that stop recommendation engines from pushing users into harmful rabbit halls; working reporting mechanisms and human review when minors are identified as at-risk; and complete transparency about how they are programming their algorithms as they relate to children.

Conclusion

Members of the Committee, I will never know everything that Owen was thinking in his final days. I will never fully understand how a bright, talented boy who loved building things with his grandfather and playing with his sister came to believe that he had no future.

But I do know this: the social media and AI products that addicted him then fed him a constant stream of extremist and suicide-promoting content played a direct role in his death.

I am not here seeking sympathy. I am here seeking action.

Owen is gone, and nothing you do will bring him back. But there are millions of children on these products right now. Some of them are being pushed down the same paths that Owen was pushed down. Some of them are one algorithmic recommendation away from the content that will radicalize them or convince them that their lives are not worth living.

You have the power to stop this. You have the power to require these platforms to value children's lives over engagement metrics. You have the power to give parents the tools and information they need to protect their children. You have the power to hold these companies accountable when they harm children by design. Not content. But

design. Because ultimately, these are the choices these platforms are making and not our children. If they wanted to operate their algorithms like a traditional search engine, to show children what they actually ask to see, that would be one thing. But that is not what is happening. That is now how these social media and AI products work.

So I am asking you to use your power. I am asking you to act with the urgency that this crisis demands. I am asking you not to let another parent lose their child the way I lost Owen.

Owen loved to build things. He loved to solve problems. He loved to create. He should be here today, working on his next project, planning for college, making music with his friends. Instead, I am here, begging you to ensure that the technology he loved does not destroy more lives.

Please do not let Owen's death be in vain. Please act.

Thank you for your time and your consideration of this testimony. I am available to provide any additional information or answer any questions that may assist the Committee in its work.

Respectfully submitted,

Amanda Zimmer
East Greenwich, Rhode Island

LESSER-REDACTED FILING

EXHIBIT 10

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Literature Review:
Effects of Watching Digital Videos on Viewer Well-Being

[redacted]

UXRS Rapid Research

April 2018

OBJECTIVE:

Provide a wealth of insights to identify themes that are important in understanding the negative effects of digital video watching on overall viewer well-being.

UXRS

METHODOLOGY:

A review of external research reports, empirical papers, and newspaper articles were combined into this presentation of findings.

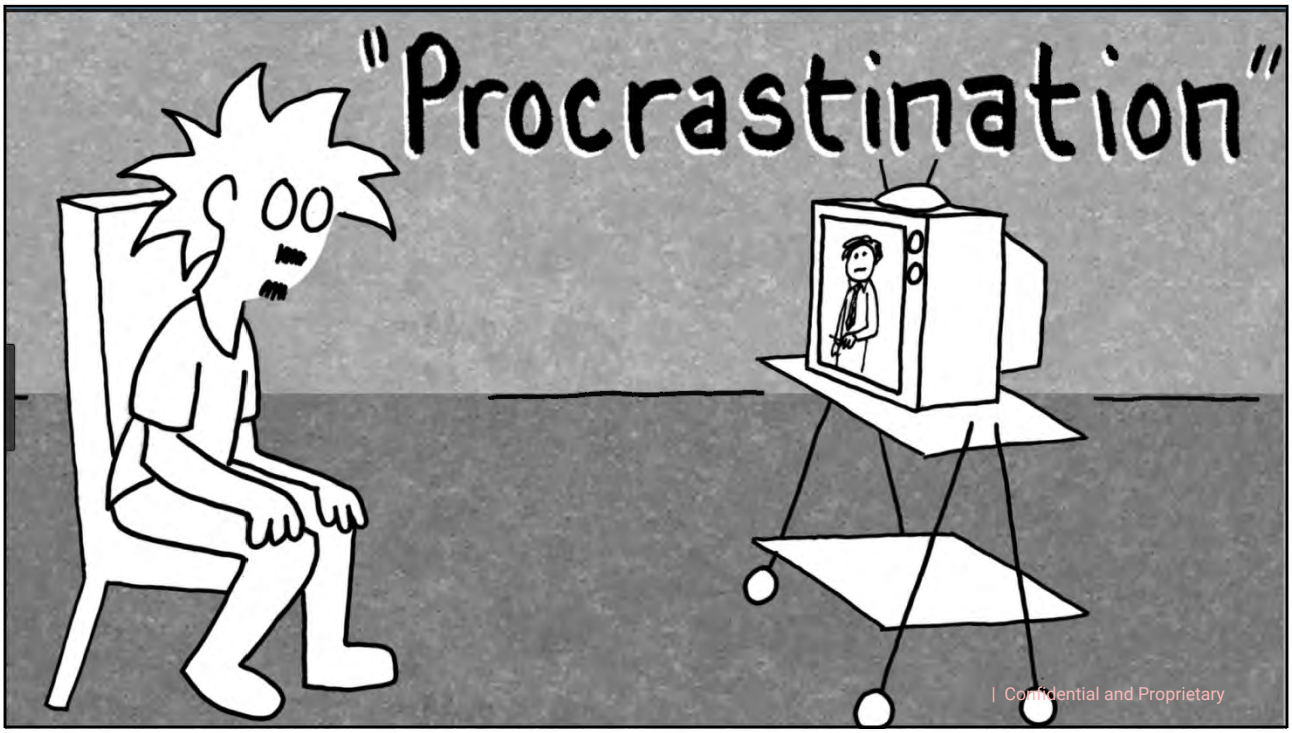
Research focused on identifying scientific evidence to validate hypotheses around the negative cognitive, behavioral, and physiological effects that video watching can have on users.

RESEARCH QUESTIONS:

1) What are the negative effects that video watching has on user's wellbeing (i.e. cognitive, behavioral, etc)?
1) What scientific evidence supports identification of those effects?
1) How do these effects relate to teens/young adults?

UX RS

Wellness Factors Affected by Digital Video Watching



Procrastination is the most commonly referenced negative effect of video watching

- **There is currently no specific research on procrastination caused by human-computer interaction!**
  - Difficult to determine what is problematic/waste of time when watching videos
- **Problematic Internet Use (PIU):** multidimensional syndrome that consists of cognitive, emotional, and behavioral symptoms that result in difficulties with managing one's offline life.
  - Overlaps with addiction
  - Often irrational and not under conscious control
  - Descends into dysfunction & causes one to avoid working on an intended task
- **"Just One More Video" Effect**
  - Very simple to watch an ongoing sequence of videos (autoplay)
  - Often followed by feelings of guilt

(Breems & Basden, 2012)

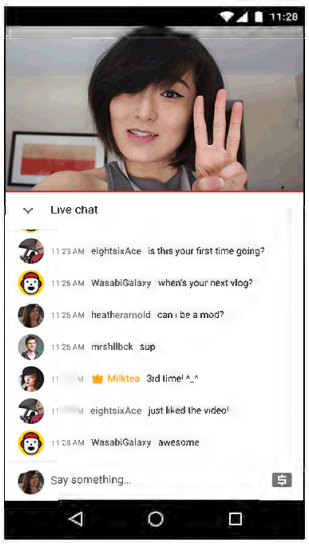
Video watching on the job is becoming a major distraction

- **Research suggests that there is an increase in the amount of distraction** caused by watching videos & time spent on social media during work hours.
- **Non-Work Related Internet Use (NWRIU) is typically a result of:**
  - Boredom
  - Job dissatisfaction
  - Distant rewards/incentives

(Breems & Basden, 2012)

YouTube “stickiness” is caused by the interactive nature of our platform

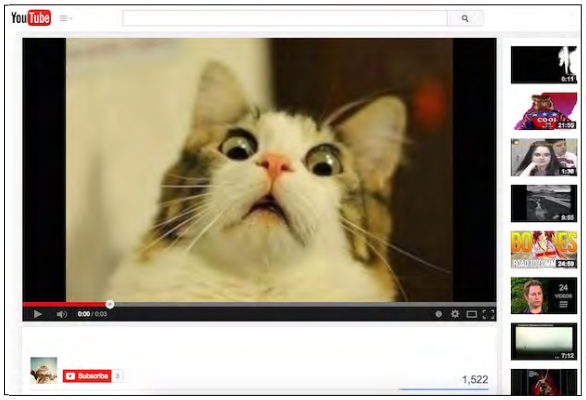
- **YouTube allows for users to watch videos, but also to interact with creators and other viewers.**
- **Users receive notifications when someone makes a post or comment on a video.**
  - Interactive behavior gratifies user needs
  - Causes users to feel that they *must* be aware of what is happening on the platform
  - Keeps users on the platform longer



(Chiang & Hsiao, 2015)

Based on survey from 265 respondents

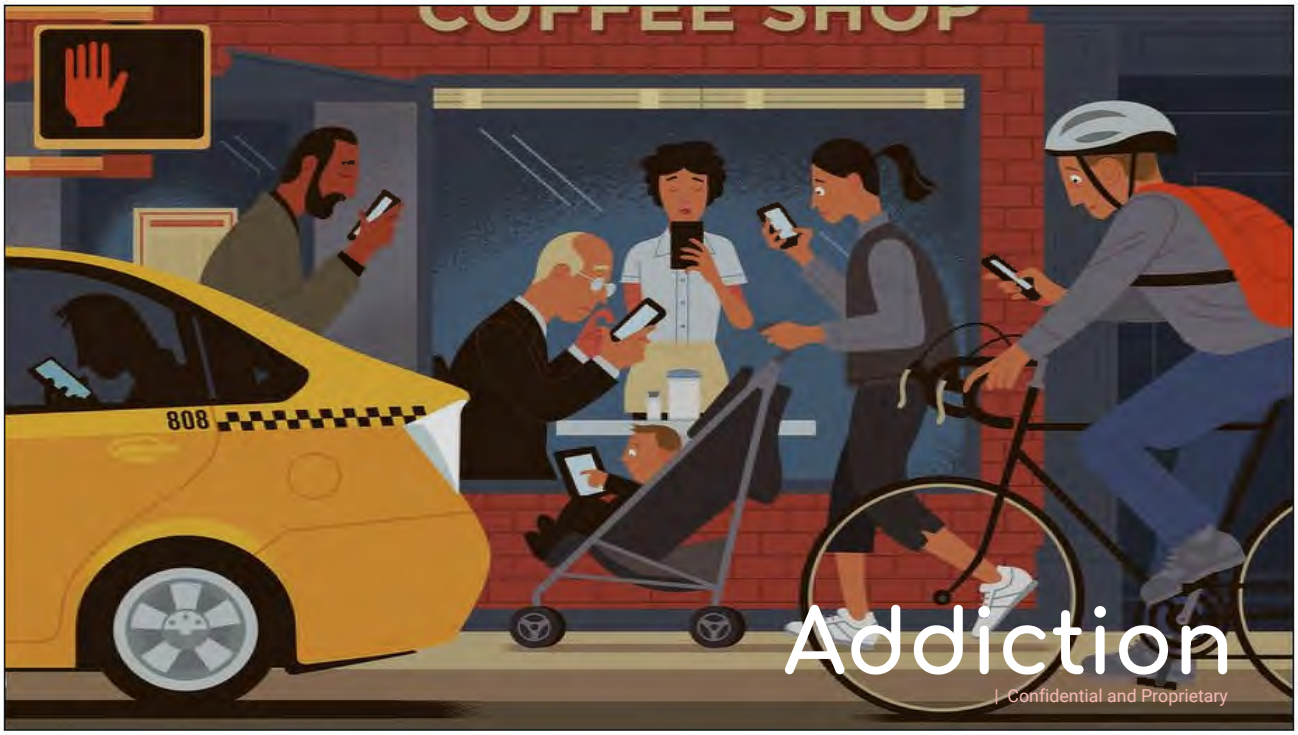
Videos are *initially* used for quick mood management, but result in excessive viewing



- Survey research suggests that **video watching is a common technique for mood management.**
- Respondents reported watching **cat videos to be in a more positive mood more quickly.**
- After one video is over, it is difficult to stop watching the videos.
- Ultimately, viewers **experience feelings of guilt** for spending so much time doing non-meaningful tasks.

(Myrick, 2015)

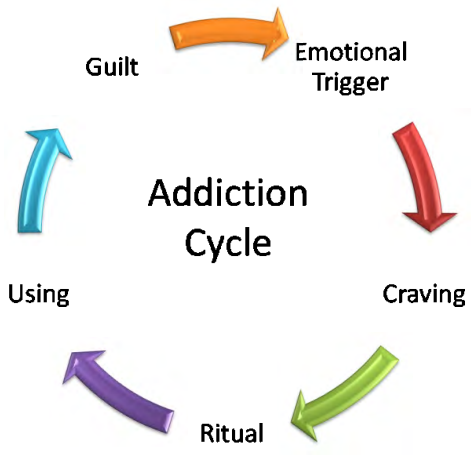
Based on survey from 265 respondents



Addiction

Excessive video watching is related to addiction

- **Watching short videos results in a "quick fix" of dopamine**
  - Dopamine is related to feelings of reward
  - Similar to feelings of reward when using drugs or other addictive substances
- **Researchers feel that YT is built with the intention of being addictive**
  - Designed with tricks to encourage binge-watching (i.e. autoplay, recommendations, etc).
  - These "tricks" have become routine
  - Technology & well-being need to meet

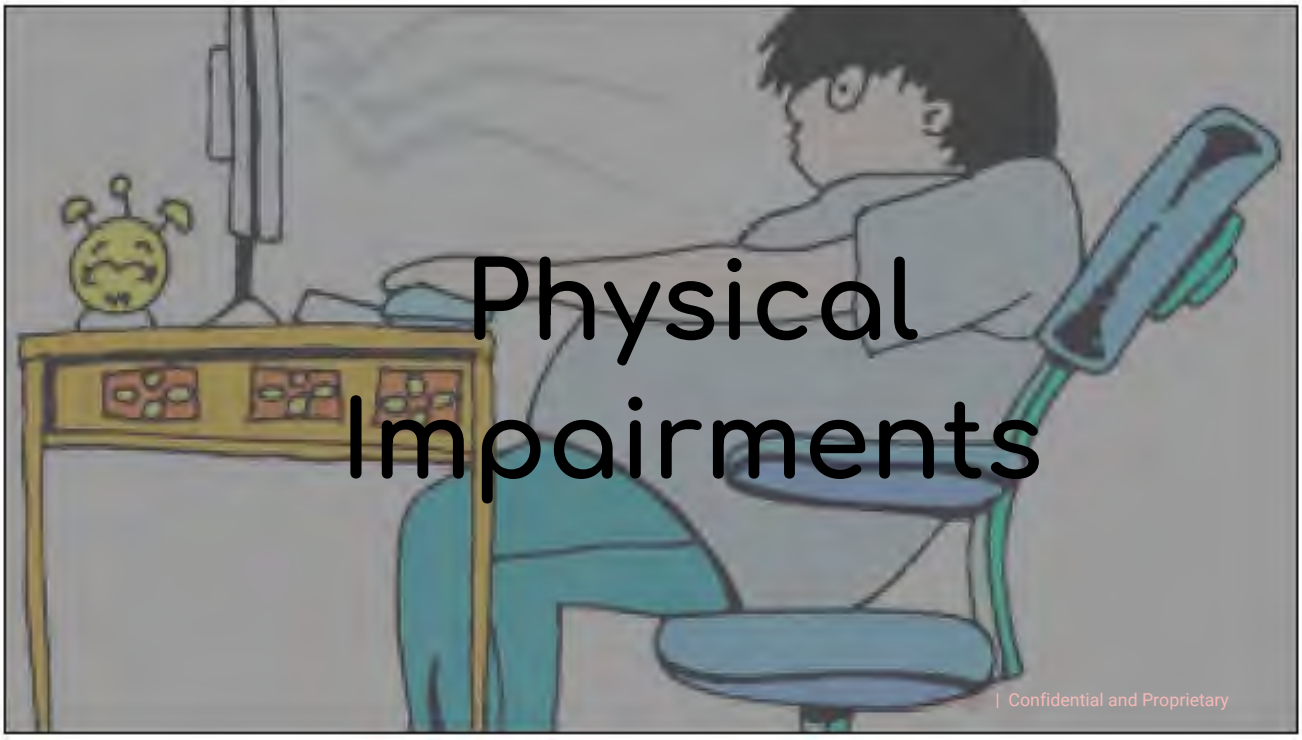


(Howard, 2012; Gunantillake, 2017)

YouTube users control what they want to watch

- YouTube is different from TV because **users can decide what they want to watch.**
- Users will **spend more time on the platform** because they continue to watch things that interest them.
- Studies show the **content people watch correlates with their personality characteristics** (i.e. sensation seeking).
- **Notifications** are a critical part of YouTube and **contribute to addiction.**
    - Users are tempted to watch videos the moment they are uploaded.

(Haridakis & Hansen, 2009; Metro Creative Connection, 2018)


Physical
Impairments
| Confidential and Proprietary

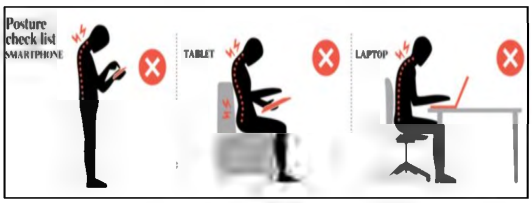
Video-watching encourages a sedentary lifestyle

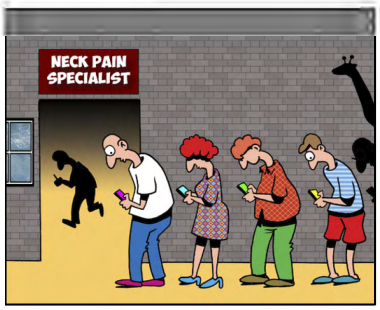
- Watching videos/TV causes **viewers to sit very still** & have **low energy expenditure.**
- Excessive video/TV watching **motivates sedentary behaviors, which are linked to obesity.**
  - Viewers are more likely to eat when watching videos
  - Reduces interest in hobbies and activities outside of the home
- Recent research shows that **sedentary behavior is reduced as awareness of it is increased.**
  - Those who recorded their behaviors in a diary study reduced their sitting behavior by 20% in following weeks.
  - Physical activity did not increase, however.

(Beers & Basden, 2012; Epstein, et al., 2011; Myrtek, 1996)

Poor posture & body aches are also a result of excessive video -watching

- **Extended screen time spent on computers is linked to poor posture.**
  - People slouch without awareness
  - Places stress on the cervical spine

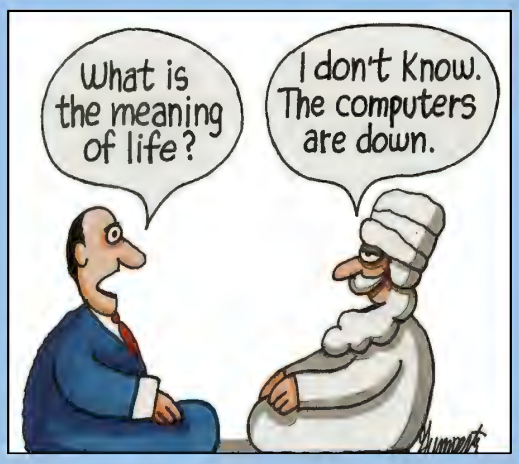


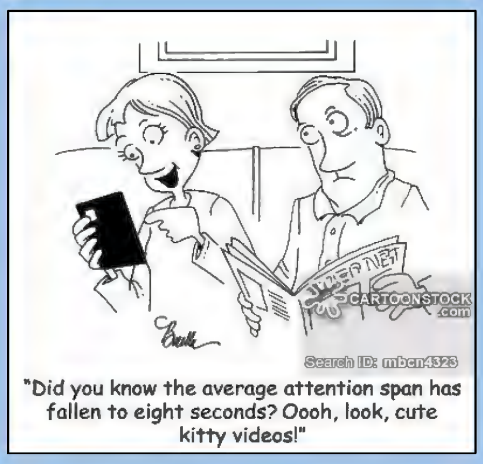


- Watching videos on mobile devices such as tablets or smartphones **causes neck pain, tense muscles, and strained eyes.**
  - Excessive screen time causes vision problems

(Peper, et al., 2017; Beers & Basden, 2012; Howard, 2012)

Cognitive Impairments





Over-exposure to videos leads to decreased attention spans

- People are used to **seeing large amounts of stimuli on small screens.**
  - Various buttons and UI elements fighting for a viewer's attention
  - Attention does *not* need to be shifted, however, to click on another video; distance from one video to another is minimal

- Our **attention is limited** in terms of cognitive resources; we cannot pay *equal* amounts of attention to everything at once.
  - Causes us to miss important information while at work (inattentional blindness)
  - Impacts attentiveness
- **There is a fine line between multitasking and distraction.**
  - People are used to getting overloaded with constant updates of information, but lack the ability to manage it.
  - Viewers feel that they can watch videos while doing other things, but this in fact is causing distractions.

(Beers & Basden, 2012; Gill, et al., 2012; Howard, 2012; Pew Study, 2018)

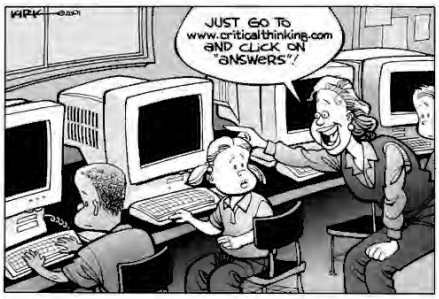
What is causing decreased attention spans?

- **1) Excitement Hypothesis**
  - Electronic media exposure is fast-paced
  - Changes focus rapidly and grabs viewer's attention
  - Makes it difficult to pay attention in less-stimulating settings (i.e. work, school)
- **2) Attraction Hypothesis**
  - We watch more content related to things we like and are interested in
  - This content is easily and quickly accessible on YouTube
- **3) Displacement Hypothesis**
  - Users feel guilty that they are doing a meaningless activity, when they could have been doing something more productive
- **Problem: How do we determine what is considered *entertainment* vs. *education*?**
  - In which cases (if any) is it acceptable to watch excessively?

(Swing, 2012)

Easy access to the web reduces critical thinking skills

- **Research shows that people immediately turn to the web to find answers to questions.**
  - Belief that all questions must be answered online
  - Decrease in the desire to read books
  - Decrease in quality of intelligent conversations among students
  - Reduces critical thinking skills
- **Viewers often search for content on YouTube to access visuals that accompany narration.**

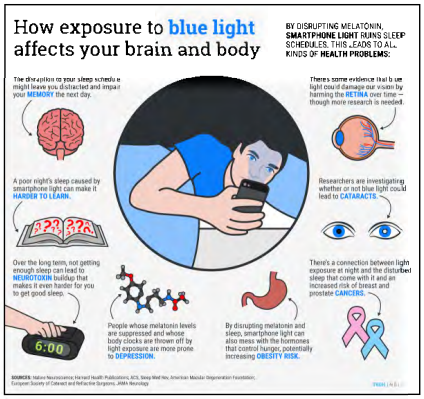


(Park, 2012)

Sleep Deprivation

Blue-light from screens causes sleep deprivation; ultimately affects the brain's mental processing

- Technology devices **emit light** at multiple (unnatural) wavelengths **that alter our brain chemistry.**
- **Blue-light reduces cortisol and melatonin,** the hormones responsible for our sleep/wake cycles.
  - This keeps the brain alert
  - Tricks the brain into thinking it needs to be awake
- **Lack of sleep can result in poor executive functioning**
  - Humans have several stages of sleep
  - REM sleep (the deepest one) is most important for synaptic rejuvenation and memory consolidation...basically, the brain's housekeeping mechanisms.
  - Inability to experience REM sleep can cause memory loss, neural circuit damage, and slower mental processing.
  - Results in lower academic performance in students/teens



(National Sleep Foundation, *n.d.*; Rosen, 2016)

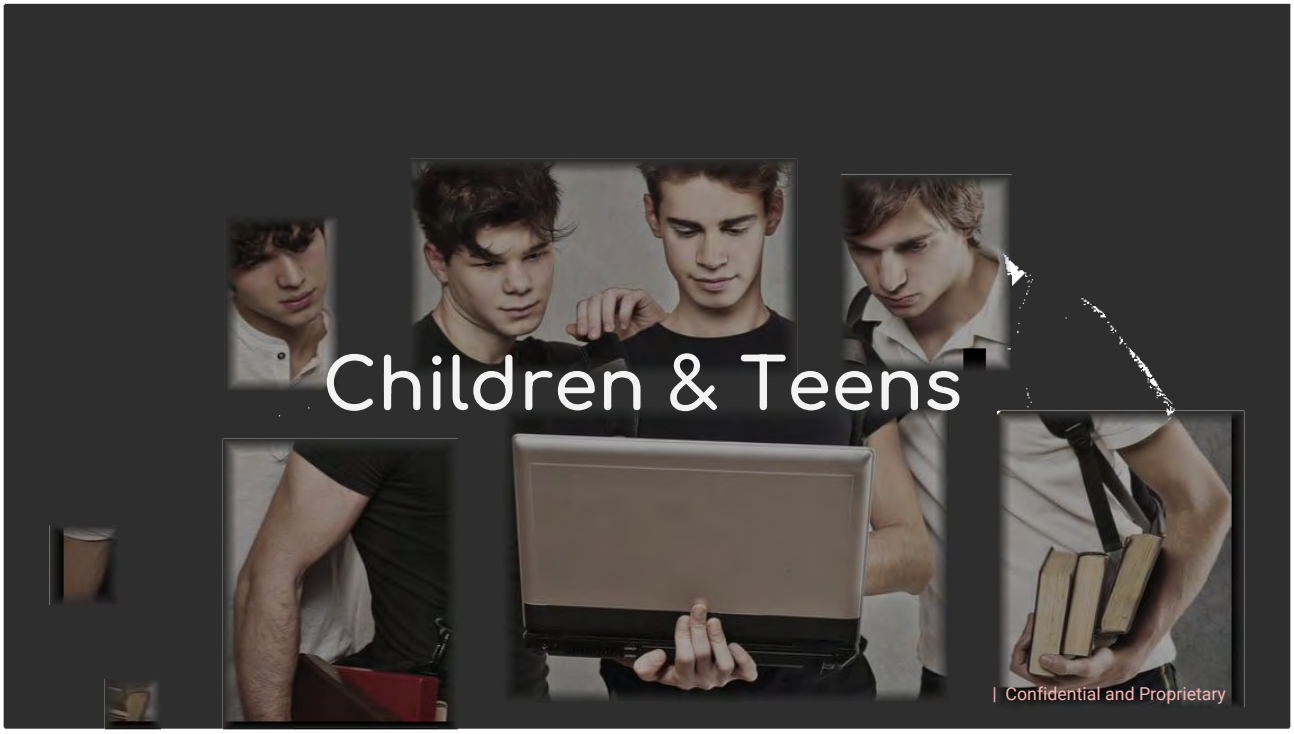
Social Isolation

Users rely on videos & social media for companionship

- **Social isolation is a growing problem due to increased interaction with technology.**
  - Reduction in people's real communication skills
  - There is less of a need to actually speak to people face-to-face
  - People become more comfortable communicating with their heads down, engaging in a "world-in-a-box" than engaging with people around them.
  - Eyes are no longer at "eye-level"...they are constantly down at some device.
  - People are less friendly and do not say hello.
  - Even in face to face interactions, people revert to burying their face in their phone.

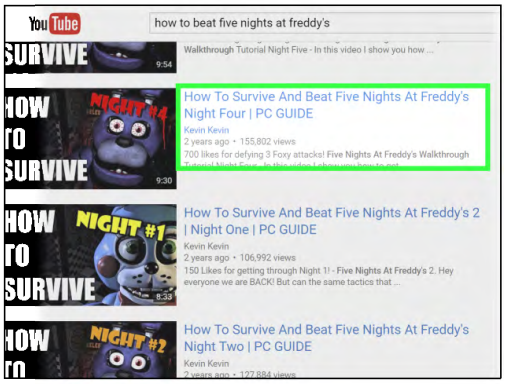
- **Most people are in denial of their increased use of technology**
  - Leads to poor life balance
- **They will not know how to cope with utilizing resources outside of technology.**

(Pew Research Study, 2018)


Children & Teens
| Confidential and Proprietary

Gaming content on YouTube is sought out by inappropriately-aged children

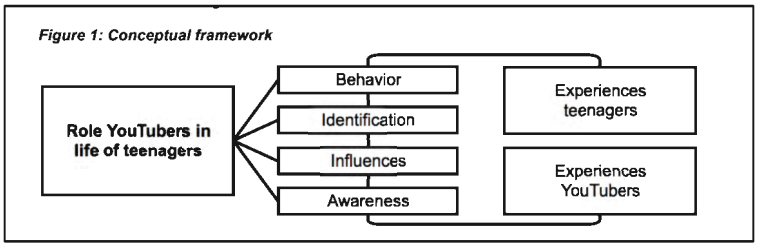
- Research suggests that YouTube's wealthy **gaming content is being watched by** viewers who are **underage** to actually play the game.
    - These "vicarious" players are still exposed to the features in the game that are not age appropriate.
- **Watching this gaming content can become addictive, as well.**
    - If DSM Criteria were applied to watching gaming videos, 1 in 5 teens would be diagnosed with addiction.



(Howard, 2012)

Teens are strongly influenced by YouTube Creators

- International research on YouTube Creators revealed that **viewers are heavily influenced by the creators they follow.**
  - Teens copy a creator's fashion, music taste, language, and behaviors
  - This frustrates parents because the creators are not always "child-friendly"
  - Creators do not seem to follow any rules or restrictions to make their content age-appropriate for all of their followers.



(Westenberg, 2012)

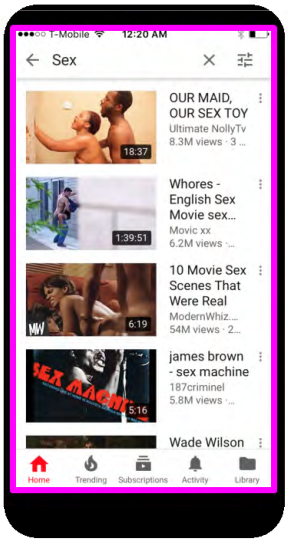
Young adults suffer anxiety from “FOMO”

- Younger viewers tend to have the **desire to be informed and aware of everything** going on **in their virtual social life.**
  - Some teens subscribe to channels/creators
  - Some teens interact with creators and other viewers by exchanging comments
- **If their device is temporarily removed or taken away, teens tend to have anxiety from the Fear of Missing Out (FOMO).**
  - Reduces lack of self-control
  - Encourages impulsive behaviors and checking for updates constantly
  - Engagement in media-induced task switching (which is ultimately distraction & procrastination)
  - Addresses *short-term*, affective well-being benefits
  - Especially problematic for self-learning (i.e. online classes)

(Meier, et al., 2016)

Increasing number of children in therapy after watching YT

- Young adults **develop curiosities** about their bodies.
  - Sex becomes a hot topic, and they turn to the internet to get answers.
- **Typing “sex” in the search query on YouTube generates graphic results.**
  - After watching this content, children are found recreating what they saw in the YouTube videos.
  - Assuming they may be suffering from sexual abuse, overwhelmed parents take their children to therapy.
- **Parents are not aware that there is a separate YouTube Kids app.**



(Daniels, 2017)

Key Insights

Key Insights

- Procrastination is the most commonly referenced negative effect of video watching.
- Video watching on the job is becoming a major distraction.
- YouTube “stickiness” is caused by the interactive nature of our platform.
- Videos are initially used for quick mood management, but result in excessive viewing.
- Excessive video watching is related to addiction.
- YouTube users control what they want to watch, which keeps them on the platform longer
- Video-watching encourages a sedentary lifestyle.
- Poor posture & body aches are also a result of excessive video-watching.
- Over-exposure to videos leads to decreased attention spans.
- Easy access to the web reduces critical thinking skills.
- Blue-light from screens causes sleep deprivation; ultimately affects the brain’s mental processing.
- Users rely on videos & social media for companionship; leads to social isolation.
- Gaming content on YouTube is sought out by inappropriately-aged children.
- Teens are strongly influenced by YouTube Creators.
- Young adults suffer anxiety from “FOMO.”
- There is an Increasing number of children in therapy after watching YT

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Thanks! Questions?

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