



Center on Media and Child Health

• ASK THE MEDIATRICIAN •

PROBLEMATIC INTERACTIVE MEDIA USE (PIMU)

GROWING UP DIGITAL (GUD) ALBERTA

Michael Rich, MD, MPH
Center on Media and Child Health

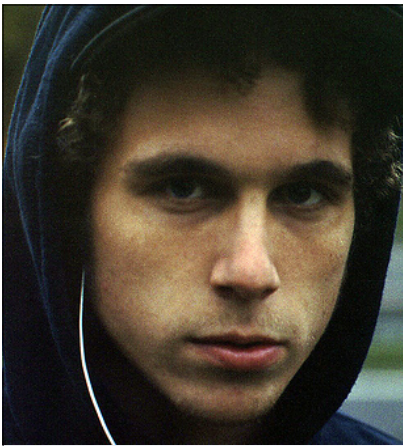


2014

Cuba

2017





Just released from hospital
 ADHD
 Declining grades
 Stopped playing soccer
 Falling asleep in school
 Stole money,
 used credit cards
 Sent to boarding school
 Lost devices, took others'
 Expelled from
 boarding school
 Parents took router out
 Matthew drank bleach

***Matthew**

* name and photo changed

97% 0-4 year olds use mobile devices

Most 2 year olds used mobile device daily
70% for parent chores, 65% to calm,
29% to put child to sleep

WHY DO PEDIATRICIANS DISCOURAGE TV UNDER 2?

- Human brain embryonic at birth
- Demand forms connections
- Disuse results in pruning

Human interaction
Acting on the physical environment
Free play and creative problem-solving

No learning occurs with TV viewing under 30 months

Sources: Rideout 2011, Anderson 2005, Council 2013



92% ONLINE EVERY DAY

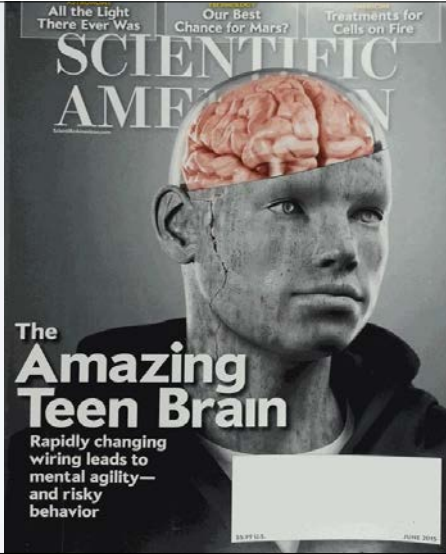
24% CONSTANTLY

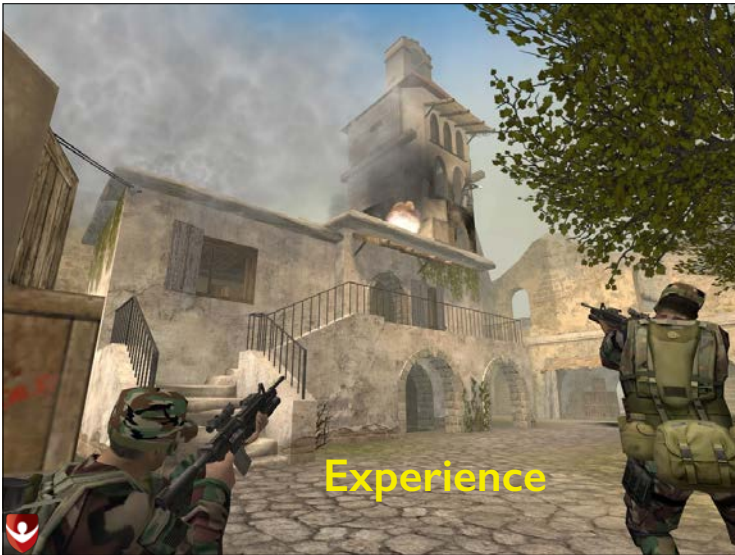


ADOLESCENCE 2018

**Why are teens
always looking
at screens?**

**Media provide
a fertile
environment
for adolescent
development**





Experience



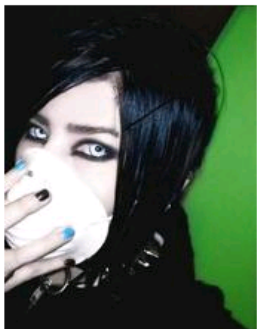


Independence



Social Consciousness

billymacneil™




male
18 years old
montana
united states

Online Now!

last login: 10/3/2007

view my: [pics](#) | [videos](#)

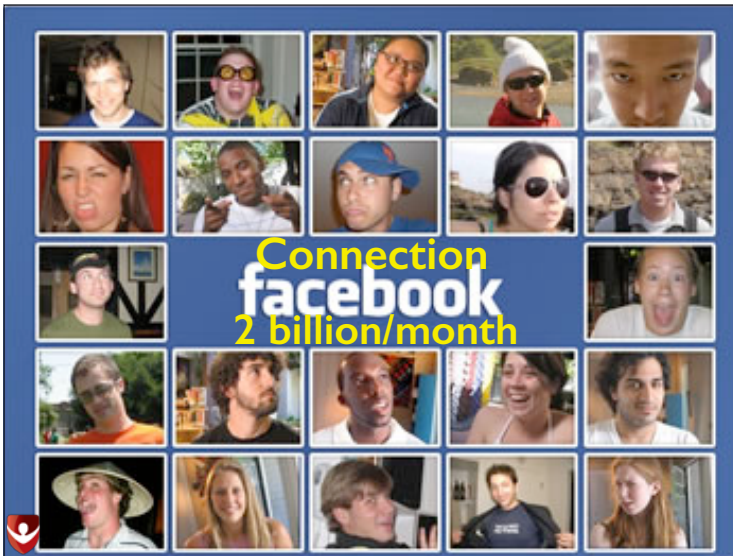
myspace url:
http://www.myspace.com/em0_extrem0



add msg blk

about me:
hello, my name is billy,
18yrs old... and
i'm pl, i'm a lazy bastard,
i hate going to work.
i hate cooking
cause it always turns out like shit.
which is why
i stay with easy things like cereal.

Identity





***Patrick**

** name and photo changed*

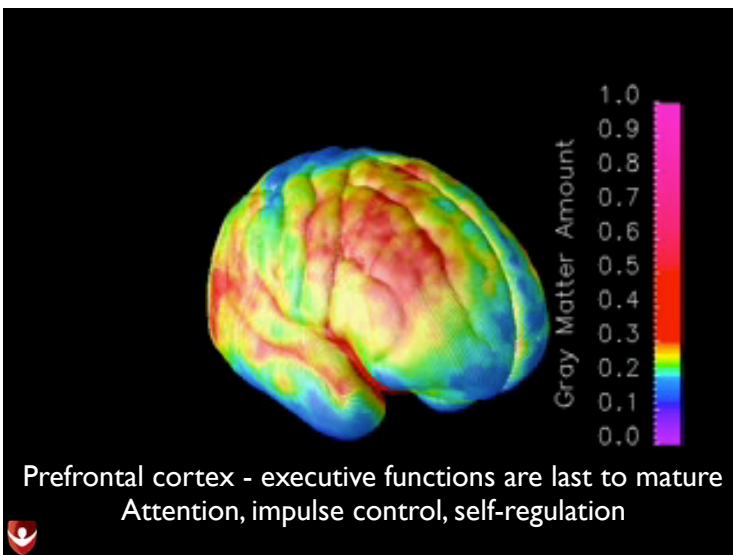
Found online porn at 9,
got in trouble for it

Academic high achiever,
not so good in sports

Uses porn to satisfy
sexual needs

Avoids social events

Feels unsure around girls,
unsure of himself and of
his interest in women



Prefrontal cortex - executive functions are last to mature
Attention, impulse control, self-regulation

TWEENS (8-12) USE MEDIA FOR JUST UNDER 6 HOURS/DAY (5:55) LED BY TV, GAMES

TEENS (13-18) FOR JUST UNDER 9 HOURS/DAY (8:56) LED BY TV, MUSIC

Multitask ~1/3 of the time = Exposed to 11:45 of content



Source: Rideout 2010

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Center on Media and Child Health

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The CMCH Research Blog

A blog from the CMCH research team

Tags

- Media Types
- Health Effects
- Ages & Stages
- Other

Archives

- 2017
- August
- July

How can I help my teen focus and stop procrastinating with media?

Posted October 10, 2017

Q: My 17 year-old son spends 4-6 hours at a time on YouTube, clicking endlessly from one sports comedy show to another. He is doing okay in high school, but will binge-watch or follow links from site to site until the wee hours. I can't get him to put the phone or laptop down. I am worried that, when he goes to college next year, he will not get anything done without parental supervision and goading?

- Worried about my web crawler, Boston, MA

** name and photo changed*

Phase I

GROWING UP DIGITAL ALBERTA

PARTNERS

- The Alberta Teachers' Association
- UNIVERSITY OF ALBERTA
- Boston Children's Hospital
- Center on Media and Child Health
- HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

ENHANCING

71% of Alberta teachers say educational technology enhances inquiry-based learning.



Teachers use digital technologies most often to



provide access to a variety of learning resources.



enable communication with parents.



determine teaching resources and materials for students who have a variety of learning needs.





ALL media are educational

WHAT WE FEED A CHILD'S MIND

is as important as what we feed her body





Fear/Anxiety

Victim

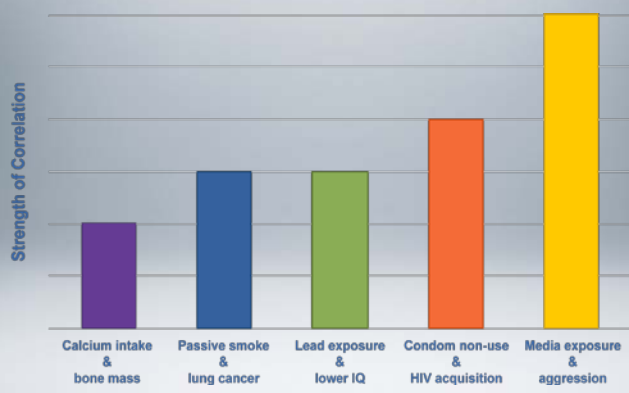
Desensitization

Bystanders

Increased aggression

Bully

Relative Strength of Correlations



DISTRACTING

MULTI-TASKING STUDENTS

76% of teachers frequently or very frequently observe students multi-tasking with technology.



DISTRACTED STUDENTS

67% of teachers say that the number of students who are negatively distracted by digital technologies in the classroom is growing.



3 out of 4 teachers believe students' ability to focus on educational tasks has decreased.

DISTRACTED TEACHERS

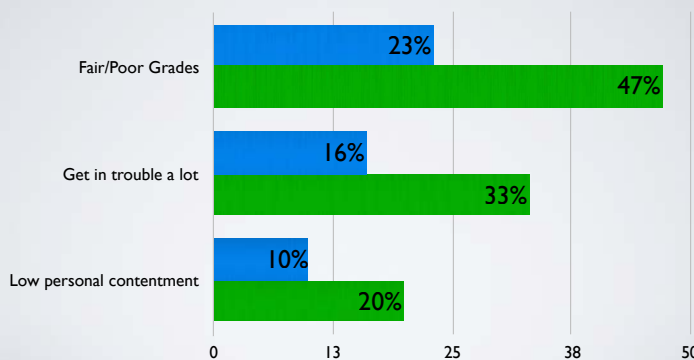
But it's not just students who are distracted by technology.



More than half of teachers feel that digital technologies are a negative distraction in their own lives.

“ I see youth who used to go outside at lunch break and engage in physical activity and socialization. Today, many of our students sit all lunch hour and play on their personal devices. ”
— Junior high teacher


CAN THERE BE TOO MUCH MEDIA TIME?





Source: Rideout, 2010

CONNECTING

WHAT DIGITAL ACTIVITIES ARE STUDENTS TALKING ABOUT THE MOST?

93%  Playing video games

78%  Watching videos online

66%  Using social media (Instagram, Snapchat, Facebook)

READINESS TO LEARN

66% of teachers are observing students coming to school tired, and their ability to focus has declined.


62% of teachers say that students' ability to bounce back from adversity has decreased.

“ I believe children are becoming passive learners; they don't know how to figure things out or think on their own. They come to school with less and less reading readiness. Many have [issues with] fine motor skills and do not know how to properly hold a pencil, scissors, or use crayons. ”
— Elementary school teacher

EMPATHY AND CYBERBULLYING

56% of teachers say that they have been approached by students who were bullied online.

“ I see how many kids are 'ruled' by their use of technology. I also see how technology is used for bullying purposes regularly. If this is our reality, then why is the push for technology in schools increasing? ”
— High school principal



Complaining of insomnia

Uses smartphone as alarm

Social anxiety


Active on Instagram, Snap

Feels alone

Started sending nude selfies

Suicidal online friend whom she texts

Was cyberbullied, then cyberbullied others



***Uma**
* name and photo changed

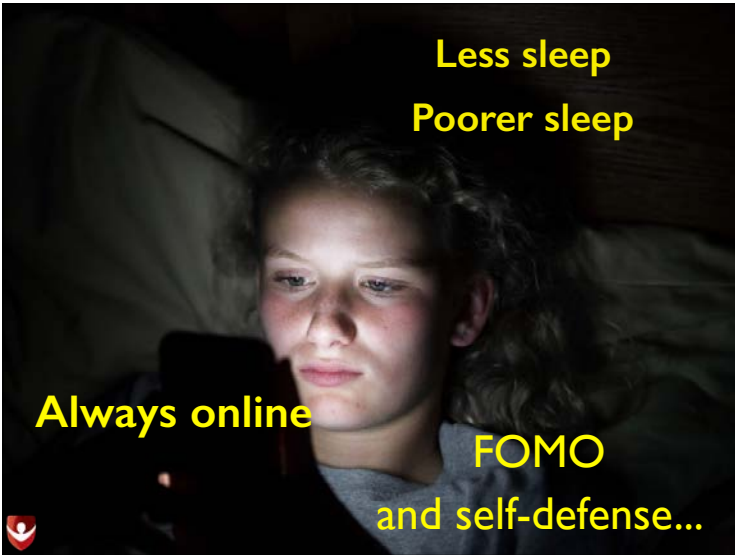

Less sleep

Poorer sleep

Always online

FOMO

and self-defense...

DISCONNECTING

Alberta teachers have observed dramatic changes in their student populations over the past three to five years.

EMOTIONAL AND SOCIAL CHALLENGES



85%
of teachers say that the number of students who need behaviour support has increased.

“ is a student's increasing online presence decreasing real-world satisfaction and positive peer-to-peer interaction? ”
— Elementary school teacher

MOOD DISORDERS

3 out of 4 teachers say that the number of students with cognitive challenges has increased.



STUDENT CHALLENGES

ANXIETY DISORDER 85%
DEPRESSION 73%

Phase 2



CONNECTED OR DISCONNECTED?

At home



85% of parents believe that technology makes it easier to stay in touch with friends and family.



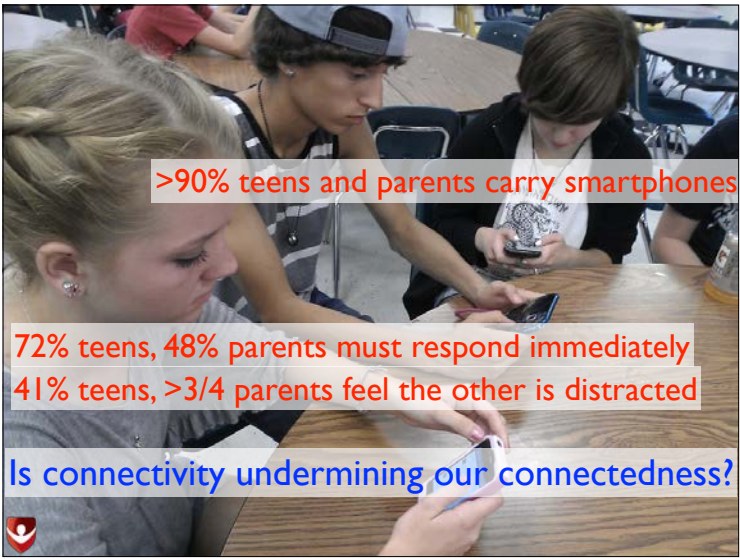
62% of parents believe they are negatively distracted by technology.

76% of parents recognize that their technology habits influence those of their children.



45% of parents report that their children have a mobile device with them every night after bedtime.

39% of parents are concerned about their children's exposure to digital content when they are not with them.



>90% teens and parents carry smartphones

72% teens, 48% parents must respond immediately
41% teens, >3/4 parents feel the other is distracted

Is connectivity undermining our connectedness?



DISTRACTED PARENTING

73% parents used devices while eating with children

20% fewer verbal, 39% fewer nonverbal interactions

30% time parents distracted by screens
Their kids >3x more likely to take risks
> 200,000 medical visits for playground injuries

Source: Radesky 2014, Krevska 2015

DISTRACTED OR ADDICTED?

30% of parents feel "addicted" to their own technologies with social media as the area of greatest dependence.

22% of parents feel "addicted" to technology with the areas of greatest dependence being watching videos and video games.

36% of grandparents believe their grandchild is "addicted" to technology.

“ We live in a digital world and using this technology is a great advantage to everyone. I believe that we need proper instruction in understanding this technology in the education system that I wish existed in my time. ”

— Alberta grandparent

GROWING UP DIGITAL ALBERTA | Parent and Grandparent Perspectives on Digital Technology, Health and Learning

What happens when devices are turned off?

1,000 college students, 5 continents, 24 hours

"I literally did not know what to do with myself." *UK*

"I didn't use my cell phone all night. It was a horrible day. I CAN'T LIVE WITHOUT MEDIA!" *Chile*

"I felt lonely as if I was in a small cage on an island."

China "Sometimes I felt dead." *Argentina*

"Media is my drug; without it I was lost. I am an addict. How could I survive 24 hours without it?" *UK*

"I was itching, like a crackhead, because I could not use my phone." *USA*



Source: Moeller, 2012



10 MOST ADDICTIVE

What is Addiction?





Behavioral Addictions

Stigma

Physiology

Punishment

What is Addiction?





~~Video Game Addiction
Internet Addiction Disorder
Internet Gaming Disorder
Gaming Disorder~~

4 types: gaming,
social media, porn,
info-bingeing
**Problematic
Interactive
Media Use
(PIMU)**

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CIMAIID – Clinic for Interactive Media and Internet Disorders

Are you seeing patients whose video gaming, social media use, online pornography or video-/information-bingeing are affecting their academic performance, relationships, anxiety, sleep, or obesity? Boston Children's Hospital has just opened a new specialty clinic, the **Clinic for Interactive Media and Internet Disorders (CIMAIID)**, which addresses these issues with evidence-based care.

Did you know:

- Adolescents aged 13-18 spend an average of 9 hours per day using screen media
- 1/3 of that time adolescents use two or more screens simultaneously, resulting in nearly 12 hours of media exposure
- 24% of adolescents say they are online "almost constantly"
- Nearly half of adolescents believe that they are "addicted" to their devices

CMCH.tv/CIMAIID

CIMAIID is a multidisciplinary team led by Michael Rich, MD, MPH, Emily Pulgar, PhD, and Mike Tasopila, MD. We have been evaluating and treating increasing numbers of children, adolescents, and young adults in our clinic whose excessive online activities have caused problems with sleep, school, social functioning, and various aspects of physical and mental health. The CIMAIID team can help you address and reduce the negative consequences of PIMU, while helping the children, adolescents, and young adults in your practices adopt and sustain healthy lifestyles and behaviors.

To schedule an appointment, make a referral, and ask questions, please contact the CIMAIID clinic at Boston Children's Hospital by calling 617-355-9447.

What if we turned our devices off?

1,000 college students, 5 continents, 24 hours off

Reflections

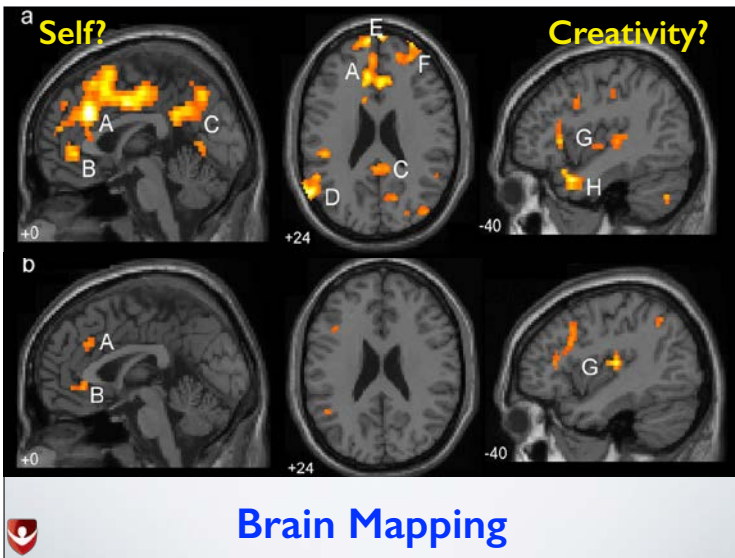
"It was an unpleasant surprise to realize that I am in a constant state of distraction." *Mexico*

"When you really get off the media, you realize how many quality things you can do." *Lebanon*

"I interacted with my parents more than usual." *Mexico*

"I've lived with my best friends for 3 years - this is one of the best days we've spent together. I was able to really see them, without any distractions, and we were able to revert to simple pleasures." *USA*

Source: Moeller, 2012



GUD ALBERTA Phase 3

CBCnews Nova Scotia

GUD Alberta study aims to learn how digital world shapes kids

Is the global village finally upon us?
By Jim Telfer, CBC News. Posted: Oct 17, 2014 10:42 AM AT. Last Updated: Oct 17, 2014 10:42 AM AT.

Kids now have astonishing technology at their fingertips from a very young age. How is it going to shape them?

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THE BMW BLACK FRIDAY WEEKEND, FOUR DAYS OF THRILLING OFFERS. [Learn more](#)

263 shares

Today's generation will be more photographed and more video-taped than any other in human history. A baby takes her first steps, and then watches the instant replay on her father's phone. A couple walks down the aisle to get married, and it's live-broadcast.

Latest Nova Scotia News Headlines

• 'Murder for lobster' trial video confession released

iPhones and Children Are a Toxic Pair, Say Two Big Apple Investors

Two activist shareholders want Apple to develop tools and research effects on young people of smartphone overuse and addiction

Work with industry to incorporate public health and child development science into R&D

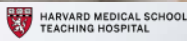
Teens took a group selfie with a smartphone in New York's Times Square on Dec. 1. PHOTO: DREW ANGERER/GETTY IMAGES

By David Benoit
Updated Jan. 7, 2018 7:28 p.m. ET

The iPhone has made Apple Inc. AAPL -0.21% and Wall Street hundreds of billions of dollars. Now some big shareholders are asking at what cost, in an unusual campaign to make the company more socially responsible.

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Instead of developing a killer app...



Be balanced

Be mindful

Be present!

Develop your Killer Be

Center on Media and Child Health

• ASK THE MEDIATRICIAN •

Our Mission: To educate and empower children and caregivers to create and consume media in ways that optimize children's health

Investigate <i>Conduct, collect and analyze research</i>	Translate <i>Educate and empower children and families</i>	Innovate <i>Develop media tools & methods that promote health</i>
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www.cmch.tv
