



Children and healthy digitization

The 5th SPAHCO-
meeting in Viborg

26th February 2018

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- Serial IT-entrepreneur
- Head of Innovation at Aleris-Hamlet Hospitaler
- Author of 'SLUK / Offline'
- Founder of 'Centre for Healthy Digitalization'





‘Dad, can I have a smartphone?’

Who are we?



Control of fire

- Ability to affect surroundings
- Prepare food
 - Shorter intestines
 - Less energy spent on eating and digesting
 - More energy for what we needed to survive
 - Bigger brain

Bigger brains

- Increase in maternal death when giving birth because of a larger head
 - Premature children was a better bet – but they couldn't survive alone
 - Compassion became an essential trait needed for survival
 - We went from being individuals into becoming part of a tribe

The Tribe

- Coordinated effort
- Communication / gossip / learning
- Fictitious thinking / religion / beliefs
- Hierarchies
- Different lifestages – different roles
- Specific rules regulated behavior in the tribe

We became a conscious species with an inner voice being able to get out of our own minds and accomplish goals that were more important than our own needs as individuals by relying on others.

conscious
an inner voice out
of our own minds
more important than
our own needs by
relying on others.

Whats in and
on our mind?

BASIC BIOLOGICAL NEEDS

FOOD

WATER

SLEEP

MENTAL RESTITUTION

ATTENTION

BRAIN

CONSCIOUSNESS

AUTOPILOT

BEHAVIOR

DELAYED GRATIFICATION
CONTROLLED
HEALTHY
BORING

INSTANT GRATIFICATION
IMPULSDRIVEN
UNHEALTHY
FUN





Delayed gratifications



Better marks



Better health



Less drug abuse



Less overweight

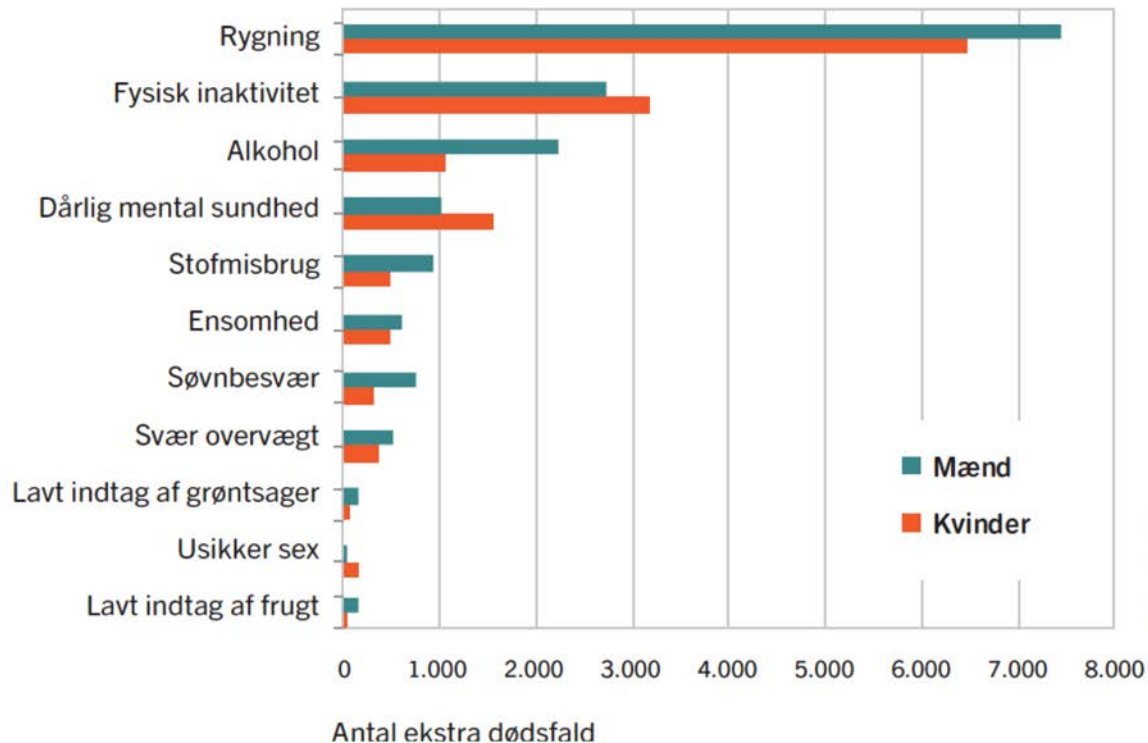


Less criminality



Better social skills

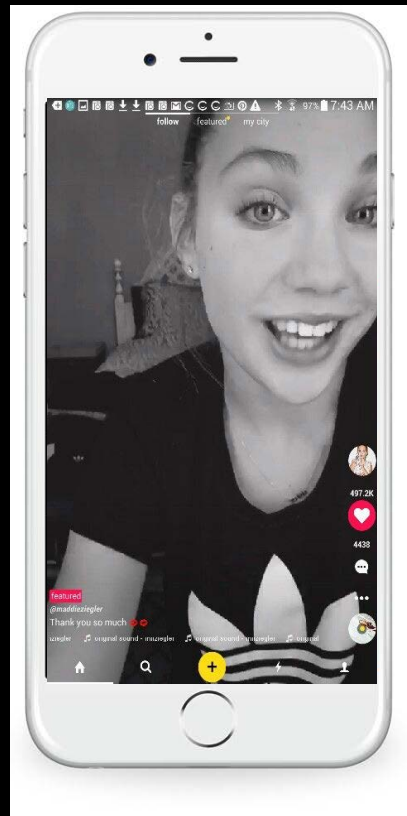
Specific riskfactors correlated to early death
adjusted for demographic factors.



May I have your
attention please?

Close your eyes
and count to 10

"Pay attention"



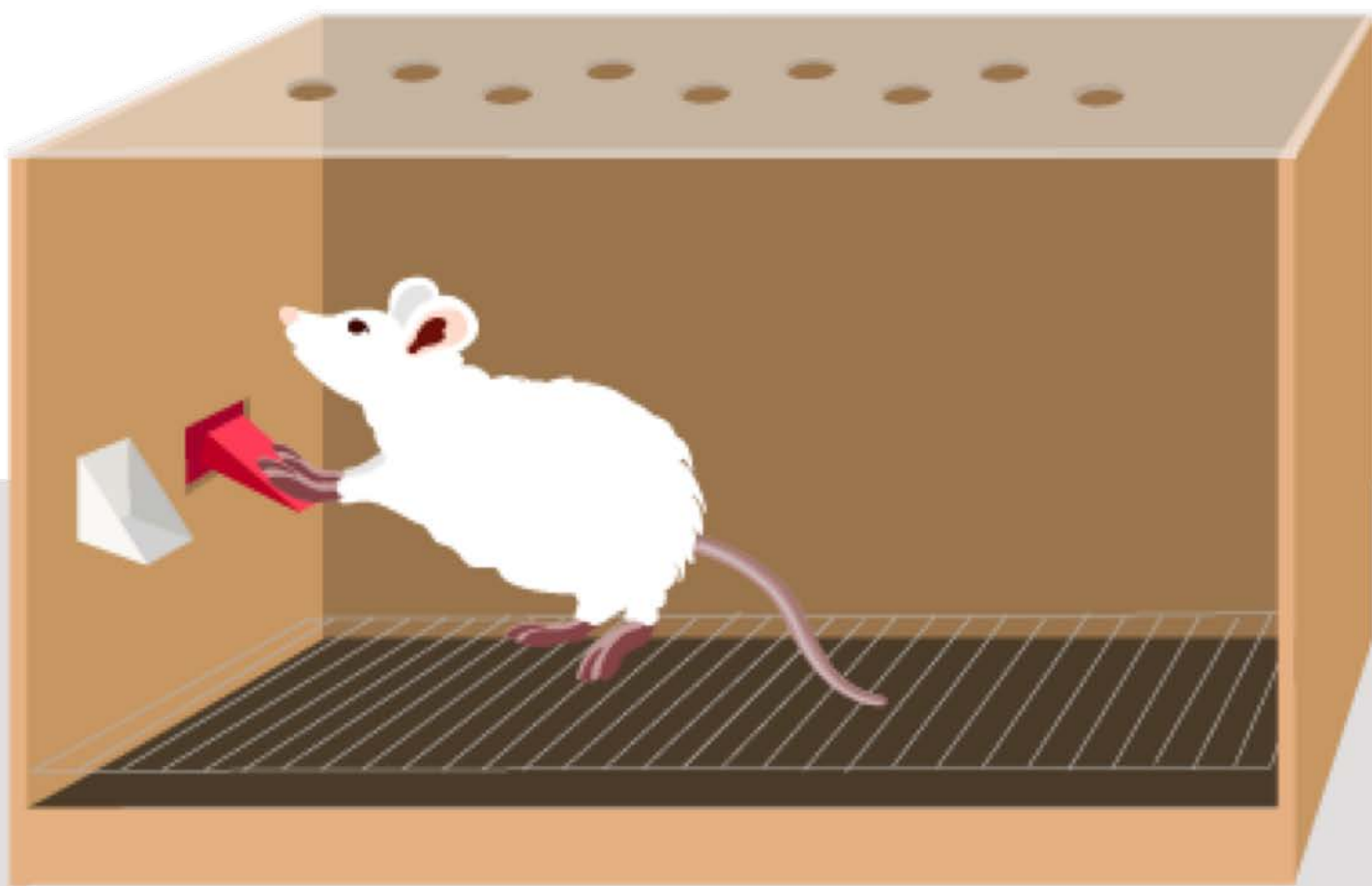


?



BJ Fogg, PhD

*My expertise is creating
systems to change human
behavior. I call this
“Behavior Design.”*



Behavior = MAT

Motivation

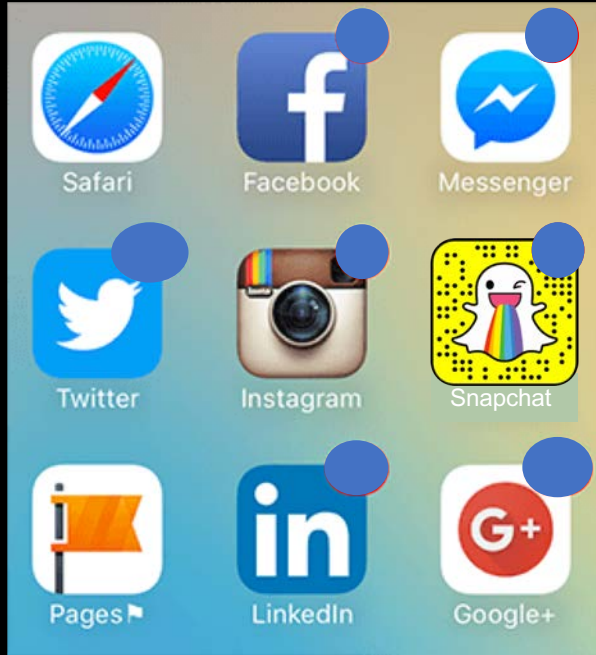
- WHY?

Ability

- HOW?

Trigger

- WHEN?



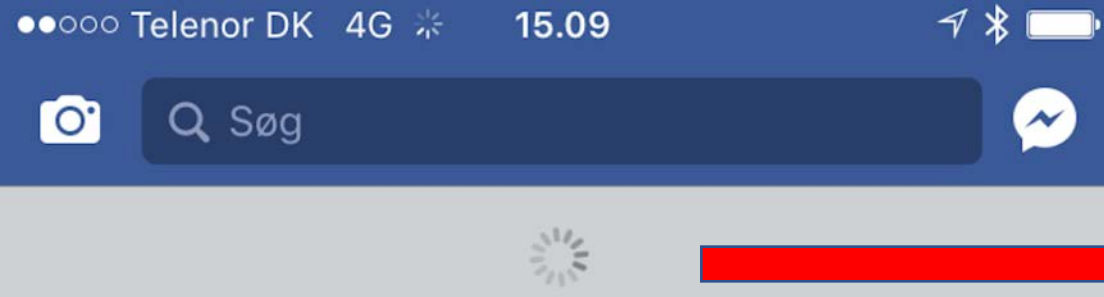
"News!"

"Interesting!"

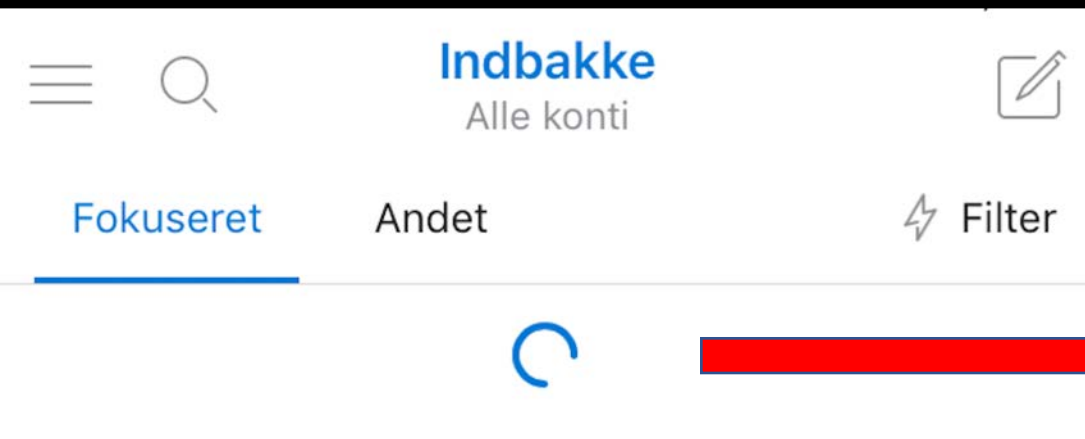
"Exciting!"

"Has anyone seen me?"

"Does anyone like me?"



"Wait, maybe there's more"

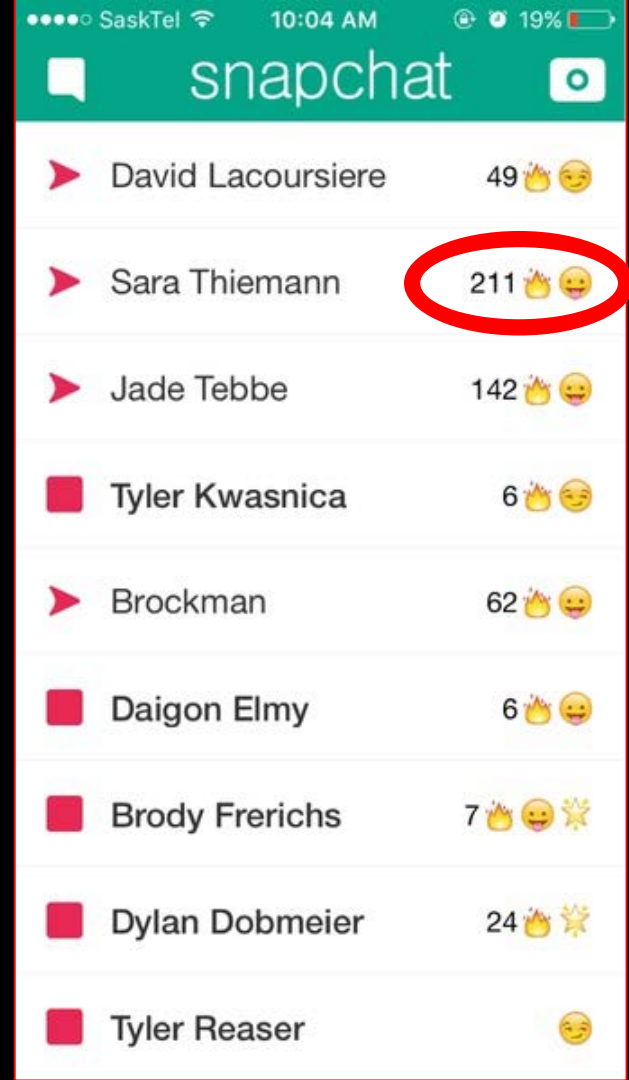


"Wait, maybe there's more"



"Wait, maybe there's more"

The art of raising a teenager...



GREG CHASE
CARMEN SERANO
EVAN BOBRICK
ROBERTA MARQUEZ
CHRISTOPHER DEMPSEY

Dr. Belknap
Carmen
Chad
Chad's Girlfriend
L.M.T.

35
Breaking
56
Bad

Season 1, Ep. 2 - The Cat's in the Bag

2008 18 48 minutes

Their first aborted drug deal forces Walt and Jesse to dispose of a pair of corpses. Meanwhile, Skyler suspects that her husband is up to no good.

Next episode playing in **6 seconds**



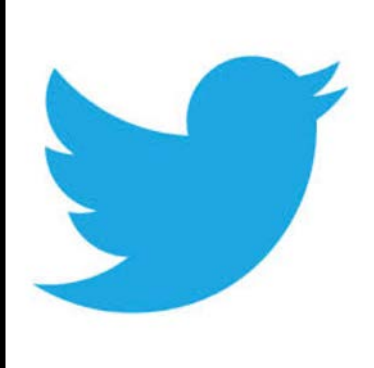
Back to Browse

More Episodes



INDY/TECH

**NETFLIX'S BIGGEST COMPETITION IS
SLEEP, SAYS CEO REED HASTINGS**



N

*How well does Facebook
know you?*



Michal Kosinski

*"He was able to evaluate a person better than the average work colleague, merely on the basis of **10 Facebook "likes."** **70 "likes"** were enough to outdo what a person's friends knew, **150** what their parents knew, and **300 "likes"** what their partner knew. More than **300 "likes"** could even surpass what a person thought they knew **about themselves.** On the day that Kosinski published these findings, he received two phone calls. The threat of a lawsuit and a job offer.*

Both from Facebook."



*Narcissus, Narkissos, from
greek mythology a
handsome, proud young
man who fell in love with
his own mirror image.*

Homo Distracticus

15

L

X

13

?

A

2

5

71

91

35

%

1



10 mio. bits / second



1 mio. bits / second



100.000 bits / second



100.000 bits / second



1000 bits / second



~11 millioner bits / second

Informationsbearbejdning

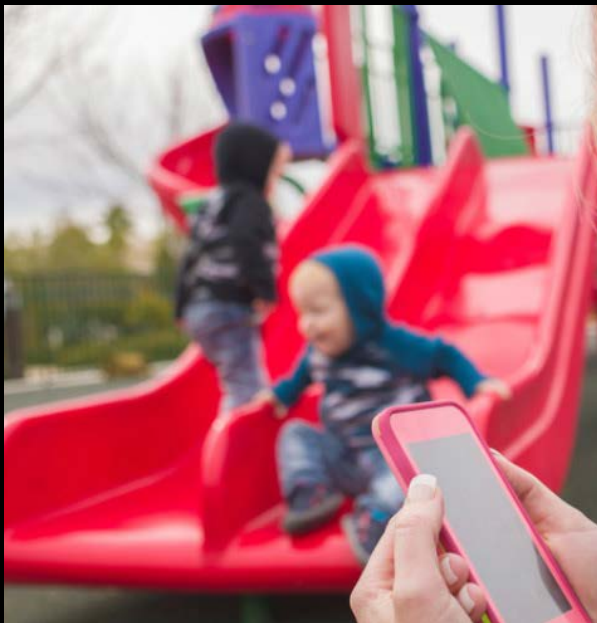
- **Udvælgelse** af, hvilke sanseinput der er vigtigst
- **Bearbejdelse** af disse input
- **Fortolkning af input**, hvorved der skabes information af relevans
- **Lagring** af informationen i korttidshukommelsen.
- **Genkaldelse af informationen** fra korttidshukommelsen
- **Handling** på baggrund af informationen.

**Millennials Check Their Phones
More Than 157 Times Per Day**



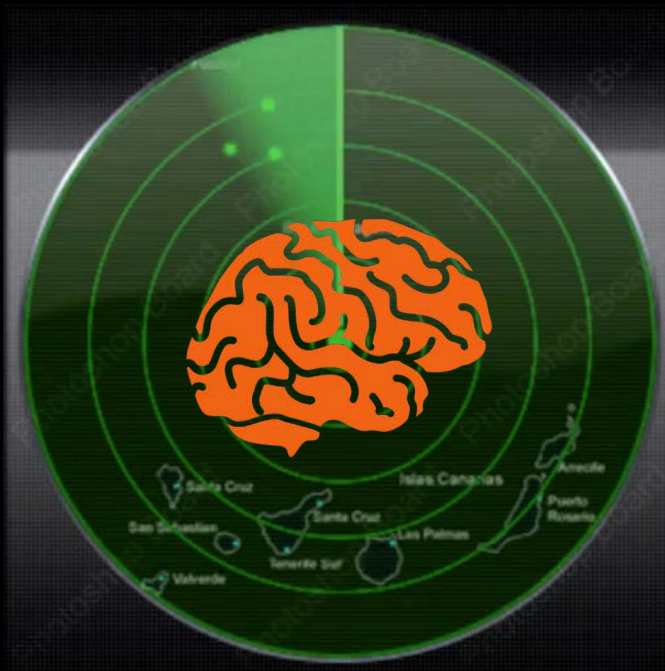


3-5000 klik, tryk og swipes



'Technoference'

The distracted brain



Downloaded from Cengage.com

Full text of report: <http://www.rockwell.com/1/americanbulletin.htm>

"Beziehungen als ein Lernangebot"

(1) *Exercise after withdrawal*

Følgende spørsmål er delt inn i tre grupper:

- Næret på leirpelt? (Hvil holdt leirpelt?)
- Hvordan har du opplevd leirpelt? (Hvordan har du opplevd å bli delt i grupper?)
- Hvordan har du opplevd å bli delt i grupper?

To: **Forrest**Mayer, K. *Behavioral and Cognitive Aspects of Learning*. (1997, 1-2) Berlin.

Is Tasty

[illegible]

4.1 Konfliktfallstrategien

Florida's population is projected to increase by 50% by the year 2020. This growth is expected to be concentrated in the coastal areas, which are also the most vulnerable to sea level rise. The Florida Department of Transportation (FDOT) is currently conducting a study to assess the potential impacts of sea level rise on the state's transportation infrastructure. The study is part of a larger effort to develop a comprehensive sea level rise adaptation plan for the state.

3.3. Appraisal of the forms given five

Er disse mennesker og deres handlinger vigtige for dig?

84 Frempfungsstelle

Marie boet, boet i gjenode, da i luvalla kvenget. Luf sin bethelvordum skal min luvne gjenget
 kvenget. Hov her skiddele, da boet i luvalla gjenget og luf sin boet i av. Boet her gjenget.

To: WILLIAM@HILLARY.COM

Er der nogen, der bekender sig berørt? Er der hellegens kendskab? Skal der bruges særligt sikkerhedsudrustning? Angiv eventuelt RUS-anslag og deres betydning.

8.3. Ergebnisse

De er uafhængende resultater, også hvis man ikke "passer" opskrifter. Det skete hos resultater fra selv fire foretag, ikke betragtet.

Imaginer, er skrevet til tal og tekst, er ikke betragtet som heri de rigtige resultater.

Resultater har været andre resultater efter betragtning af foretagene, passet til foretagene.

84 *Management*

Alta typer af insektinger skal være med de særlige former og med talværdier

The distracted brain

- 75% in a study stated that they waste at least 2 hours daily on their job.
- People switch tasks every 3 minutes on average
- After a distraction it takes approx. 23 min. 15 sek. To get back on track
- Distractions lasting more than 3 seconds results in a doubled error rate
- Half of the distractions... are self inflicted

ADHD

- Unfocussed, easy to distract
- Forgetfull and disorganized
- Restless, 'always on the go',
- Impulsive, interrupts, hard to wait for own turn
- Hard to correct own behavior
- Hard to say no to impulsed driven needs



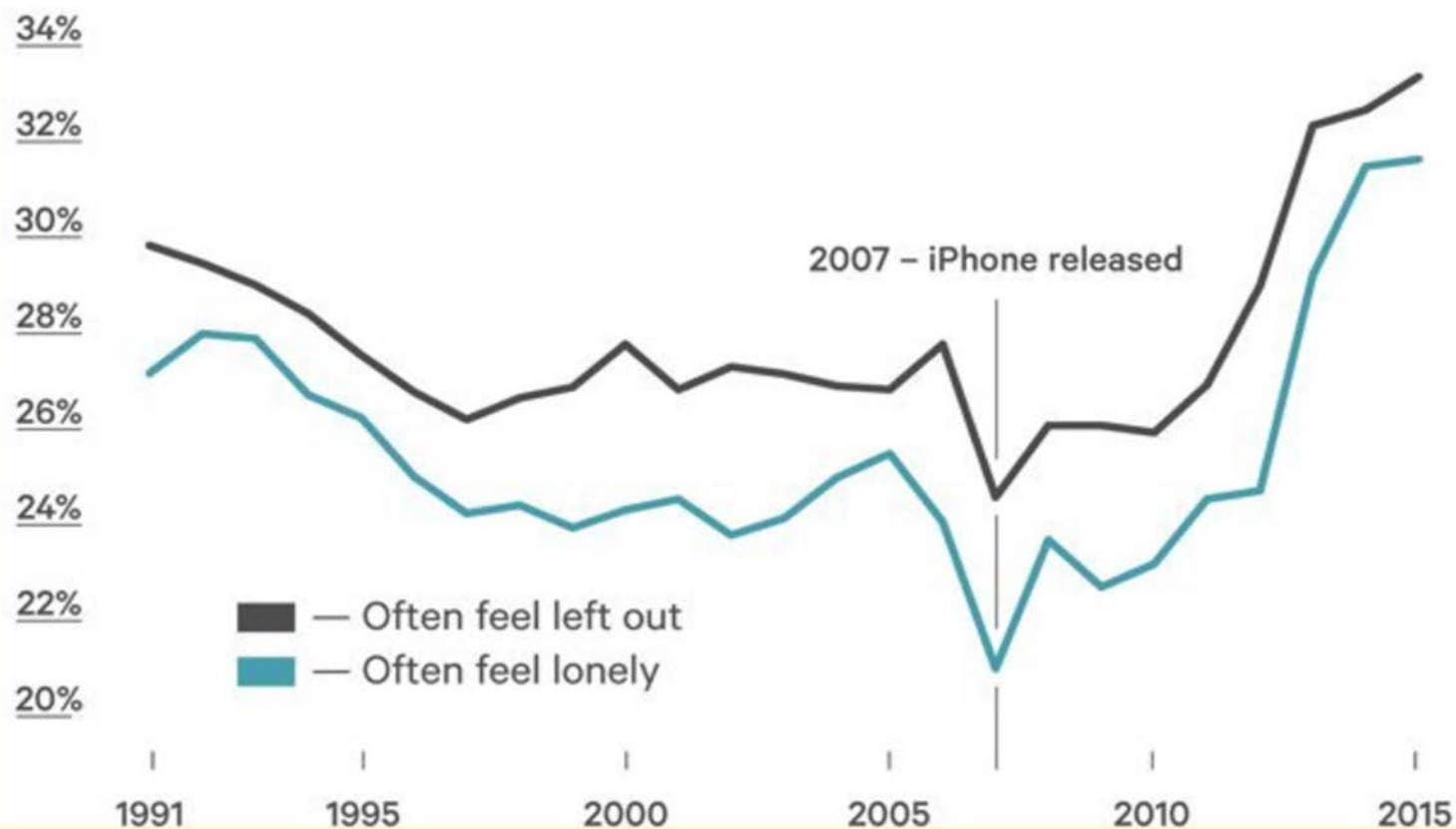


Have Smartphones Destroyed a Generation?

More comfortable online than out partying, post-Millennials are safer, physically, than adolescents have ever been. But they're on the brink of a mental-health crisis.

More Likely to Feel Lonely

Percentage of 8th-, 10th-, and 12th-graders who agree or mostly agree with the statement "I often feel left out of things" or "A lot of times I feel lonely"



How tech can harm kids mentally

- **Mental Health**
 - **Cyberbullying:** 40% of children have been involved in a cyberbullying incident
 - **Self-harm:** 48% of teens who spend more than five hours a day on electronic devices report at least one suicide-related outcome (felt very lonely and considered, planned or attempted suicide)
 - **Feeling addicted:** 50% of teens feel addicted to their mobile devices. 78% check their devices at least hourly.

How tech can harm kids physically

- **Physical health**
 - **Brain development:** Internet addicted kids have significantly less gray mater, which is associated with planning and impulse control.
 - **Attention & distraction:** 21% of college students spend their classroom time for activities unrelated to class
 - **Healthy growth:** A study of 2 years old showed that BMI increased for every hour per week of media consumed.

Survey - Dec. 2017

276 highschool kids

- **81%** thought that they spent more time on their smartphones, than they were aware of on a conscious level
- **Almost 70%** found themselves on a regular basis with their phones watching it without thinking about what they were doing.
- **65%** lost completely track of time, when they used their phone
- **73%** said that the time they spent on their smartphone had increased
- **48%** wanted to reduce their smartphone usage
- **72%** regularly slept with an active smartphone under the pillow or beside the bed.
- **Almost 80%** were on their phone all day long even if it disturbed them in their daily activities
- **Almost 80%** experienced a loss in concentration due to their smartphones
- **70%** felt an immediate urge to pick up the phone instantly when it rang or vibrated
- **85%** often found themselves checking their phones over and over – even when they knew there was nothing new or important to see on it.



‘Dad, can I have a smartphone?’

Digital pollution - and how to deal with it



10 mio. bits / second



1 mio. bits / second



100.000 bits / second



100.000 bits / second

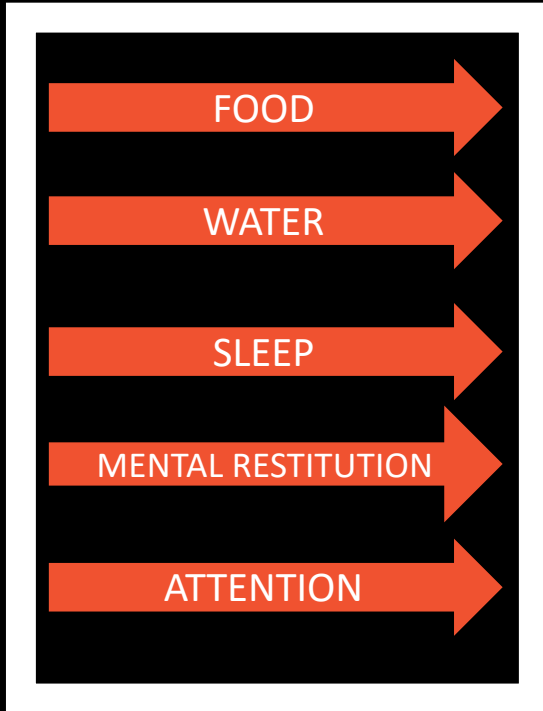


1000 bits / second



~11 millioner bits / second

BASIC BIOLOGICAL NEEDS



This is known about selfcontrol

- Selfcontrol leads to succes
- Selfcontrol depends on bloodsugar
- Selfcontrol is a limited resource
- Selfcontrol improves with practice
- Selfcontrol improves with physcial exercise
- Selfcontrol depends on sleep
- Selfcontrol and empathy follows the same brain patterns



A photograph of a group of students sitting in a row, all looking down at their smartphones. The student in the foreground is a blonde woman with a white scarf. The student next to her is wearing a yellow shirt. The student further back is wearing a dark jacket and large headphones. The background is slightly blurred, suggesting a classroom or lecture hall setting.

Case: Aagaard Highschool

*De digitale dopaminkilder kan nemt
udkonkurrere vigtige ting i vores liv.*

Project Digital Education: Day 1

- Two lectures focussing on human needs, dopamin, social medias to establish a basic understanding about the topic.
- Lecture by Imran Rashid followed by a workshop with teachers and parents

Project Digital Education: Day 2

- Teaching without digital media. Two hours with handwriting and other analogue practices.
- Later that day 2 hours about the differences between non-verbal communication and digital communication. Hvad does body language and eye movements tell us?

Project Digital Education: Day 3

- Moral dilemmas about SoMe. Shitstorms, digital abuse, prescence and FOMO. The students tested different viewpoints and made role plays on the topics.

The Result

- Our phones shouldn't be the easy way out and we will try and help each other to avoid an unnecessary smartphone usage
- We are allowed to tell each other to reduce the usage, if it's necessary
- We have to learn to relax more without phones. We need to be more present and more together in our leisure time.
- It's not allowed to use phones after 22.00
- Whenever someone play music from the one, it has to be something everyone wants to listen to.

Case IIH Nordic

- **Keep focus.**
- **Use music to avoid noises.**
- **Automate your emails.**
- **Create an overview.**
- **Have shorter meetings.**

The Result

- The company went from 37 to 30 hour work week
- The business grew 20%
- The boss lost 10 kilos.



- **Buy an alarm clock and get the phone out of the bedroom**
- **Use the airplane mode when with other peoples**
- **Remove notifications from the ‘popcorn’-apps**
- **Forget the phone more**
- **Switch off the brain more**



CENTRE FOR HEALTHY DIGITIZATION

Because the digital transformation affect humans.

Questions?



Imran Rashid

OFFLINE

The art of survival
in a digital world

Lindhardt og Ringhof

Dr. Imran Rashid

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