Use these tools for what they do well and then turn them off when they are not useful. - Dr. Rich

Michael Rich, MD, MPH is Associate Professor of Pediatrics at Harvard Medical School, Associate Professor of Social and Behavioral Sciences at the Harvard School of Public Health, and practices Adolescent Medicine at Boston Children’s Hospital. He is the Founder and Director of The Clinic for Interactive Media and Internet Disorders at Boston Children’s Hospital. His team of doctors works to identify the underlying driver for what he terms ‘PIMU’ - Problematic Interactive Media Use. There are four types of PIMU: gaming (mainly in boys), social media (mostly in girls), porn (both boys and girls) & info-bingeing. He recognizes that abstinence is not an option; instead, self-regulation is the goal. His website AskTheMediatrician.org and his Digital Wellness Lab - www.cmch.tv - answer questions and provide resources for parents and teachers.

NOT AN ADDICTION: In medicine, doctors cannot prove causality. They cannot even prove that smoking causes lung cancer. Until there is a reliable biological mechanism, too many variations exist. Dr. Rich does not consider media use an addiction, as there is no physiological change associated with it. Instead, with increased use, we see behavioral changes. He conducted a study to determine what behaviors are seen with extensive media use. The results indicated a correlation - but not causation – Dr. Rich noted the difference – between heavy screen use and poor grades, getting in trouble, and feelings of low personal contentment.

CONCERN – LESS SLEEP/POORER SLEEP: Human brains are embryonic, which makes them so sophisticated. Stimuli in the environment help build brain matter. Screens act to stimulate our brains. A recent phenomenon is teachers reporting more children falling asleep in school and forgetting what they are learning. The reason is that kids go to bed with their phones, claiming, perhaps, ‘I need it as my alarm clock.’ ‘Sleeping’ with their phone prevents children from accumulating the Stage 4 REM sleep when the brain consolidates learning. Kids have trained their brains to stay alert for the 3 am text. Many adults suffer from FOMO - or Fear Of Missing Out. Teens have FOBLO - or Fear Of Being Left Out. They believe that if someone cares about them, they should get a response within 17 seconds.

UNDERMINING OUR CONNECTEDNESS: Dr. Rich finds irony in the fact that our near-infinite connectedness is undermining human connection. 72% of teens and 48% of parents feel that they must respond immediately when their phone goes off. As a result, 50% of teens and 75% of parents think that the other is always distracted. Dr. Rich conducted a research study measuring differences in affect when using social media, texting, and face-to-face interactions. He determined that texting has no difference in affect. However, negative affect is 21% higher when using social media, and positive affect is 18% higher during face-to-face conversations. Dr. Rich has many patients with social anxiety who find it
scary to talk face-to-face. He counsels them to ‘Upgrade it by 1’. If you are thinking of tweeting, then text. If you are thinking of texting, then call, if you are thinking of calling, then meet face-to-face.

RECOMMENDATIONS

INTERVENGE EARLIER ON: Dr. Rich believes that parents need to get involved in their children’s digital lives earlier on. ‘Parent’ is a verb, not a noun. Parenting involves talking with and listening to children. Our children do not need another friend; they need parents.

CLEAN UP OUR BEHAVIOR: The devices are not the problem – we are. It is not Facebook’s responsibility; we have to fix ourselves. And, it is not an easy engineering fix. Human behavior is varied. There is always someone who will go to the dark side. We have to make changes together. Dr. Rich contemplates that maybe we have to bottom out before we get better.

USE MEDIA WITH KIDS – LEARN AND TEACH: Children are continually learning how to behave in the world and need their parents’ guidance. Drop the pejorative language when talking about video games. To kids, they are just games. So, when you offer to play your child’s favorite video game with them, your behavior is saying ‘I love you and respect you and want to understand you.’ When you approach your children and their interests with curiosity, their defenses come down, and you create teachable moments. After playing a game together, you can have a more evenly-balanced conversation.

DETERMINE YOUR FAMILY VALUES: Violent media research shows three things:
1. There is an increase in fear/anxiety for those who play these games. Dr. Rich worked with a child who was afraid to walk his dog at night after playing Call of Duty because anytime he heard a noise in the bushes, he thought he was about to be ambushed;
2. All humans get desensitized to violence over time; and
3. There are increased aggressive thoughts and behaviors in SOME kids – and we don’t know which kids they are in advance.
Some video games are arguably reflective of skills that children need to master: punishment for things done wrong and rewards for things done right. As parents, we can decide if the content of a specific game is something we want our children to learn and rehearse. Remember that the pilots who crashed into the Twin Towers on 9/11 practiced flying on a video game.

TREAT THESE DEVICES AS TOOLS, NOT TREATS: Do not give media devices to children as rewards, instead give them when they are ready. He used the analogy of a circular saw. You would not give your seven-year-old a circular saw, even if they had a 1st-grade woodworking assignment. We should approach access to the Internet as something that
can cause great harm when misused. We tell our kids that the Internet is a scary place. Instead, we should teach them how to master it.

**DEVELOP CRITICAL THINKING:** After watching a YouTube video or an online advertisement, ask them to decide if it is ‘real’ or ‘alternative facts.’

**PRIORITIZE AND MANAGE DAY WITH CHILD:** Screen-time limits are obsolete. Restrictions only turn media into a forbidden fruit; making kids want to subvert the rules. Work with your child to view each 24 hour day as an empty glass that you want to fill. Begin with 9.5-11.5 hours of sleep, add in a family meal, and time at school, then encourage them to fill up the rest of the glass with activities and downtime. By doing so, you are giving them ownership over their lives and teaching them time management skills.

**TAKE A DIGITAL SABBATH:** Turn everything off for one day a week. The first time is stressful, and the second time is liberating.

**MAKE TIME TO DAYDREAM:** We can now map the human brain. One discovery about the benefit of boredom came about by accident when a researcher left the machine on while the patient was daydreaming. The result? The brain light up. When our mind wanders, we move from thought to sensation to memory, like a butterfly flitting from flower to flower.

How did Einstein come up with the Theory of Relativity? He said it was because he was bored.

**FINAL WORDS:** Instead of creating a killer app, let us try to create a killer bee: BE BALANCED – BE MINDFUL – BE PRESENT.
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According to Zomorodi, if we constantly prevent ourselves from becoming bored, we miss out on bigger things. Neuroscientists and cognitive psychologists agree that when you get bored, you ignite a network in your brain called the ‘Default Mode.’ Our body goes on autopilot while we are folding the laundry or walking to work, and that is when our brain gets busy. According to boredom researcher Dr. Sandi Mann, “Once you start daydreaming and allow your mind to wander, you start thinking a little bit beyond the conscious, a little bit into the subconscious, which allows different connections to take place.”

Default Mode is when we connect disparate ideas, solve some of our most nagging problems, and do something called ‘autobiographical planning’ or looking back at our lives. We take note of the big moments. We create a personal narrative. And then we set goals and figure out what steps we need to take to reach them. But instead of letting ourselves move into Default Mode, nowadays we chill out on the couch – also while updating a Google Doc or replying to email. The average person checks email 74 times a day and switches tasks on their computer 566 times a day. According to Professor of Informatics, Dr. Gloria Mark, “We find that when people are stressed, they tend to shift their attention more rapidly. We also found – strangely enough, that the shorter amount of sleep a person gets, the more likely they are to check Facebook. So we’re in this vicious habitual cycle”.

**PROJECT 1 – BORED AND BRILLIANT:** Zomorodi asked herself what would happen if we broke this vicious cycle? What if we reclaimed those cracks in our day and invited boredom back into our lives? Could it help us jump-start our creativity? Maybe her Podcast listeners could help her find out. She called the project *Bored and Brilliant*. And within 48 hours, 20,000 people signed up! Daily challenges included ‘In Your Pocket’ when on the train, bus, sidewalk, or passenger seat, participants were told to keep their phone in their pocket. Or — bonus points — in their bag. ‘Photo-free Day’ instructed: “Take absolutely no pictures today. Not of your lunch, not of your children, not of your cubicle mate, not of the beautiful sunset. No picture messages. No cat pics.” ‘Delete That App’ Day encouraged participants to delete the app that was taking up too much of their time.

To measure any improvement, Zomorodi realized she needed data. She partnered with some apps that would measure how much daily time people were spending on their phone.
When the data came in, it turned out that participants had cut down use on average just six minutes, from 120 minutes to 114. At first, she was disappointed, then she spoke to the scientists and researchers who told her that six minutes IS significant. And, moreover, the fact that people changed their behavior at all for a week was extraordinary. However, it was the participant’s stories that told her much more than did the data. They told stories about how they realized they used to relax by playing their guitar, and that they suddenly understood that they had not played it in years. Or, things bigger than that, that people sat down and just thought about what the family dynamics were and how to get to a better place in their relationship. One participant said that he felt as if he had woken up from mental hibernation.

PROJECT 2 – INFOMAGICAL: Buttressed by the success of Bored And Brilliant, Zomorodi created a new project for 2016 – InfoMagical. It was designed to make information overload disappear. Using either email or text messages, she issued five challenges to participants over five days –single-tasking, tidying our phones, avoiding meaningless memes, delving deeper into conversations, and setting a larger "rule" or "mantra" for information consumption. Texters got reminders through the day and check-ins at night. The first thing she asked people to do when they signed up was picking an “information goal” – one of 5 – to keep them on track all week. The number one goal (31 percent of participants) was: “be more in tune with yourself.”

Early on in the week, about 40% of the people said that they felt less overloaded and less overwhelmed with information at the end of the evening. By the time she got to Day 5 on Friday, 71% of the folks who responded said that they felt less overloaded.

PROJECT 3 – THE PRIVACY PARADOX: 2017’s Project, The Privacy Paradox was another five-day series of challenges, newsletters, and mini-podcasts intended to help listeners take control over their personal information and digital identity. Day 1 explained what smartphones are tracking and why it matters; Day 2 discussed how algorithms see us, sell us and then sell TO us; Day 3 encouraged listeners to reclaim their privacy; Day 4 explained that all our posting and sharing is making it hard for us to protect our true, inner self. Or even find it; and Day 5 told listeners to define their acceptable conditions for living a good life online.

Before the project, 43% of listeners said they knew how to get more privacy in their lives, and after the project, that number went up to 80%. Almost 90% of participants also said this project showed them privacy invasions they did not know existed. Fully 70% of listeners now want to push for the protection of digital rights. A third of said they would delete a social media profile and another third said this project made them want to meditate.
* These projects are still available at
https://www.wnycstudios.org/shows/notetoself/projects *

THE FUTURE: Zomorodi believes that everything from democracy to mental health is at stake in our digital world. At the same time, exciting things ARE happening. The #MeToo Movement and #Black Lives Matter are examples of harnessing social media for positive social change. Then there is that woman who created GIF’s of black women because they did not exist. With 50% of the world’s population expected to own a smartphone by 2021, we need to get closer to universal access, and we need to do it ethically. She advocates for the creation of a list of products that meet a set of ‘well-being standards’ examples being Firefox and MailChimp. When asked if there are apps for children to use that do not involve parents, she recommended ‘Moment.’ Created by the former CEO of Pinterest as a gift to his wife, there are exercises you can do within the app to improve your relationship with your phone.

CONCLUDING REMARKS: Zomorodi encourages us to stop giving boredom such a bad rap. Boredom is an extremely important human function that we are starting to breed out of our daily lives. She concludes, “The more you look around, the more you see that we have lost the capacity for patience. There is rarely any downtime, eye contact, or conversations out loud where people stutter or make mistakes or take more than 140 characters to figure out what they want to say. If we are going to have excellent ideas, we need to let them take the time to take root and then blossom, and that does not happen in a tap of an app. We are humans. We need time. And that is the one thing that our phones cannot give us more of. We need to discover what brings us meaning and how to best take care of each other”.