Designing Humane Tech Guide

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Design for Bodies

Design for Bodies Intro

While most people can think of reasons as to how social media can affect someone's mental health, not many can think of how it affects our physical health. There are direct and indirect correlations that using social media has that impacts our bodies. A direct correlation would be something that directly harms our physical health such as eye strain from using too much social media. Indirect correlations would be through a sort of domino effect. Social media affects our mental health and how we view ourselves and how we look, which in turn will put our physical health into jeopardy.
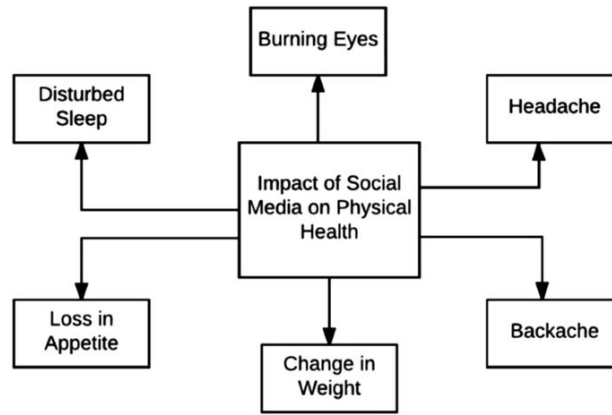
Significant Problems (Indirect)
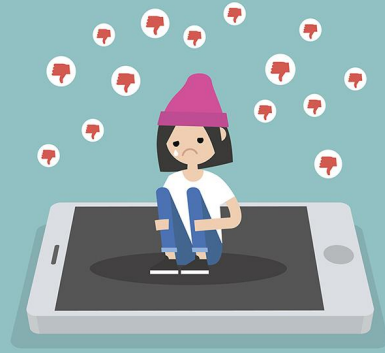
One major problem about social media is that it affects the way we view ourselves. People gain unrealistic body standards by seeing edited photos of their peers or supermodels online. Because of this they feel like they are not good looking enough and take drastic measures to try and "fix" their appearance. Some examples of this would be starving themselves, which in turn would lead to an eating disorder like anorexia. Some people might become depressed because of the fact that they do not look like the people they see online, and will eat more because they feel like nothing will change anyway. There was a test done on a group of female college students that had intervention from social media, "The interventions reported on positive changes to physical activity and diet-related behaviours through increases in physical activity levels and modifications to food intake, body composition and/or body weight."

Significant Problems (Direct)

Direct problems of social media affecting health would be eye strain, as well as head, neck, shoulder, and back pain. How does social media cause eye strain? Well because it is on a screen. I would consider this a direct effect only because people there is no way to view social media other than through a screen. We blink our eyes on average about every 20 seconds. This causes tears to be evenly coated on our eyeballs. When using a screen we do not blink as often, which causes our eyes to dry out. The blue wavelengths from the screens light also causes irritation to our eyes. Eye pain can cause headaches, which can irritate your neck, which can irritate the shoulders, and then the back.

Design Suggestions For Best Practice

What are some ways that we can improve social media to fix some of these problems? Well in terms of social media affecting how we view our personal appearance, we could add restrictions on negative comments online. Another approach would be to create fitness/diet goals in social media apps. Many fitness/diet apps exist, but none of them work in tandem with social media. Mixing these two together would be an ideal way to promote staying active and eating healthier. In terms of social media affecting our bodies directly, there are several recommended approaches. One technique to prevent eye strain is through the 20-20-20 method, "every 20 minutes, look at an object at least 20 feet away for at least 20 seconds." But what are some ways we can actually fix this issue in social media? Allowing people to change their social media theme to dark mode (ie. using darker/grayer colors instead of white or brighter colors) would help with eye strain. Also adding a bluelight filter toggle to a social media site would help prevent eye irritation.

Design for Culture

Design for Culture Intro

There are several harmful effects of modern-day technologies and lifestyles, leading to declining mental health, failing memory, and emotional instability in people. Social Media platforms such as Instagram and Snapchat have set unrealistic standards for young children and teenagers using these outlets, which causes a lot of mental harm. Problems that not only affect their mental health but also affect the others around them. The issues emanating from social media also generate ripple effects, which can cause damage to communities and families. While considering these issues, the question that comes to mind is, what are the best practices for this situation, and what are the significant problems addressed by these best practices?

Significant Problems

Firstly, one must identify the issues emerging from these problem-causing technologies. As technology and social media gain more popularity, traditional family dynamics have started to change. Parents wanting to spend quality time with their children take place far less in modern-day households. According to UKessays, "technology plays a major role in hindering family relationships" (UKessays). It profoundly impacts households by diminishing family quality time and reducing socialization and face-to-face interaction. To resolve these unwanted problems, some families practice scheduling family social time. During these events, the families would turn off the televisions and force each member to place their phones into a container.
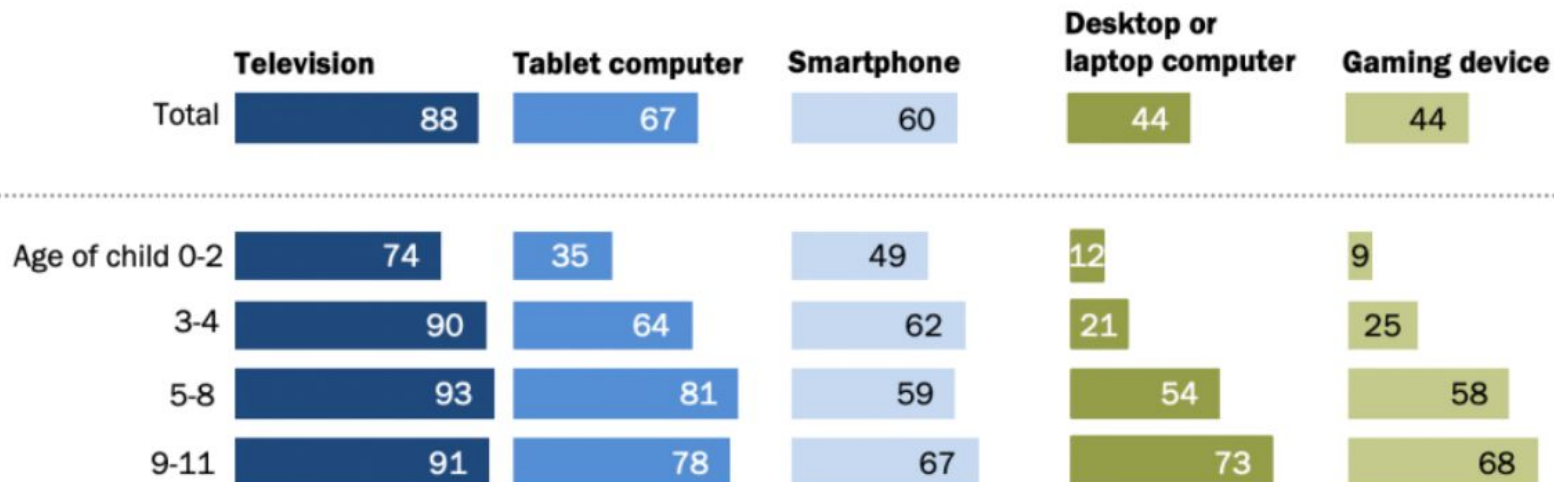
Design Suggestions / Benefits

The goal is to remove digital distractions to better connect with the family. Of course, designing practices around these distracting technologies will forever be a challenge since these technologies do not simply disappear, but the idea is to be mindful. Parents should teach their children the importance of social family and community interaction, which can decrease mental and social problems. While parents should teach their children this importance, family socialization is severely affected due to the inappropriate use of technology by the parents. Socialization in a family system is essential because it builds a stronger bond, teaches each member about their values, norms, and beliefs, and helps them realize the support and guidance they have throughout their lifetime.

Children's engagement with certain types of digital devices varies widely by age

% of U.S. parents of a child age 11 or younger who say that, as far as they know, their child ever uses or interacts with a ...

	Television	Tablet computer	Smartphone	Desktop or laptop computer	Gaming device
Total	88	67	60	44	44
Age of child 0-2	74	35	49	12	9
3-4	90	64	62	21	25
5-8	93	81	59	54	58
9-11	91	78	67	73	68

Note: If parent has multiple children, they were asked to focus on one child when answering this question. Those who did not give an answer are not shown.
Source: Survey of U.S. adults conducted March 2-15, 2020.
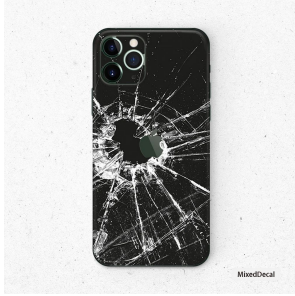"Parenting Children in the Age of Screens"

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Design for Earth

A Non-Sustainable World

With the ever changing world of technology, the planet is the one that suffers the most as there are constantly new creations coming out. Have you ever thought of how many still have old iphones after they upgraded to new ones? This had proved to be a problem when it comes to e-waste as smartphones can contain a number of hazardous materials like mercury, cadmium, lead, arsenic, and beryllium. Not only are most phones with hazardous materials, but they aren't made to be prepared easily. Most parts of the iphone are glued into place, making it difficult to repair and replace parts.

Going Forward with Phones

For every million cell phones recycled, we could recover 35,274 lb of copper, 772 lb of silver, 75 lb of gold, and 33 lb of palladium. This is why in the future, we need to moving to recyclable materials like aluminum. Rather than throw the phones out there are places the accept old or broken iphones to salvage reusable parts. Some companies like Apple are moving forward in the phone recycling with new machines like Taz, a machine that uses new shredder-like technology to separate magnets from audio modules and recover more rare earth elements. Apple have continued to develop two other robots, Daisy, and apple patented iPhone disassembly robot and Dave, a robot that disassembles taptic engines.

When customers return their devices to Apple

Significant Problems

There are still massive problems that comes with all this. Potentially dangerous lithium batteries can be dealt with on their own, while valuable metals are concentrated for recycling. When Apple destroys your old device, plenty of perfectly functional computer processing chips and cameras that could live on get melted down. Screens that could have replaced cracked ones, lending a few years of life to an older phone, are destroyed, and the trace amounts of the minerals that make them work are lost as so much dust. What's more, all the energy that went into mining, refining, manufacturing, shipping, and assembling those materials evaporates. According to Apple's latest environmental responsibility report, the average Apple product takes 252 pounds of CO2 to make — and 77 percent of the company's total greenhouse gas production comes from manufacturing.

Resources

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