

RUNNING HEAD: The Effects of Infinite Scroll

Exploring the Negative Effects of Social Media's Infinite Scroll on Cognition and Attention Span in the Minds of Today's Youth.

STS 4500 Prospectus
S.E.A.S. Computer Science
B.S. Computer Science
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Exploring the Negative Effects of Social Media's Infinite Scroll on Cognition and Attention Span in the Minds of Today's Youth.

Overview:

I want to explore the role of modern social media in altering brain chemistry, with specific emphasis on its ability to shorten attention span and encourage ADHD. Having grown up always being easily immersed and distracted in media, through this project I seek to understand how media has had a negative impact on my life. I aim to use actor-network theory to explore the relationship infinite scroll has on the human mind and show you the reader why infinite scroll should be banned from an ethical perspective.

Positionality:

I read a lot before technology. In 5th grade I read over 50 books, and in 6th, after getting a computer in middle school, I read 2. Now in the ten years since then, I have read another two books of my own accord. I blame this largely on technology; it has an immense capability to immerse. Now, I find myself unable to be bored. Any dull moment in my life is a trigger to pick up my phone and find the nearest app to get sucked into. My life has become overcome by media and technology, and it is nearly impossible to separate myself from it. This is why I am so interested in the presented subject matter.

Problematization:

Infinite scroll has had a profound influence on the human brain, and our daily lives. In almost all social media, we the consumer, the people, have transitioned from the client to instead the product. Companies use and sell our data, and because of this they have a distinct monetary motive to immerse us. While making technology take over our lives makes the companies a lot of money, it also has a very negative impact on us as people. I will be aiming to show the negative impacts of infinite scroll and looking at possible solutions and why there seem to be none. The main interactors in my thesis will be the consumer, the designer, the company, and the government. I will mainly be evaluating the ethical and moral challenges the company faces with regards to their negative impact on the consumer, and the government's ethical and moral challenges they face in restricting the company from harming the consumer.

Guiding Question:

How can we in some way create an ethical solution to infinite scroll, either through the restriction of social media and corporations, or through alternative solutions?

Projected Outcomes:

I aim to address the issue by proposing governmental reform on the number of advertisement-views social media companies can sell. The longer a user stays on a site or app, the more advertisements the social media company can "sell" or present to the user (Van Dijck, 2014). If companies had limits on the number of advertisements they could sell to an individual

user each day, they would have less incentive to addict users to their applications for as long as possible.

Technical Project Description:

I have no previous experience working with infinite scroll. Instead, in my capstone I aim to write an essay detailing potential changes to social media interfaces that would help make them less addictive.

Preliminary Literature Review & Findings:

Social media is incredibly entertaining. It is designed as such, and its ability to immerse is simultaneously its biggest curse. In my preliminary research, I have found that social media and infinite scroll in apps like Tik Tok have been found to correlate with lower attention span. (Fazzini et al., 2018, p. 1130) (Lin L et al., 2016) The issue then becomes, how can we regulate this, and why does there not seem to be more support for this regulation? This is because social media and infinite scroll are inherently entertaining. The apps play on people's emotions, and people feel 'entertained'. The apps lure the unthinking consumer into a sort of willful ignorance, and here the main difficulty arises in gathering support for regulation of these companies / technologies.

STS Project Proposal:

First and foremost, this project is an STS project because, by definition, it is exploring the role science and technology—social media and infinite scroll—have played in society—our generation's attention spans and susceptibility to ADHD.

I will be approaching this project from an ethics and values perspective—mainly focused on social justice and the risk and harm, and the ethics of companies perpetuating these. I will primarily be using the work of Fazzini and Moreau, as the first dives deeply into the negative impacts of social media on the brain, and the second is an excellent resource that discusses the ethics of companies involved in the harmful effects of social media and data collection.

I will mainly be looking at affordance theory constructed by James J. Gibson, as it suggests that objects in the environment offer opportunities for action, and that the perception of these opportunities can shape behavior and cognition. In the context of infinite scroll, the continuous presentation of content often can lead to the affordance of users keeping scrolling, even when they no longer intend to. This affordance may lead to negative effects on brain chemistry, as the constant flow of stimuli can overstimulate the reward system in the brain, leading to feelings of addiction, impulsivity, and decreased attention span, almost like a drug (Rosen, L et al., 2013).

Finally, I plan on aggregating data through analyzing the work of scholarly articles on whether Infinite Scroll applications truly have a negative impact on life-quality.

Barriers & Boons

In general, I have been surprised by the number of studies and knowledge there is out there on the subject, so I am hopeful. I do think it will be difficult to tie together the negative impacts concretely with an ethical dilemma, because although studies do show correlative between infinite scroll and attention span data, it will be a hard argument to make that companies should be regulated from doing business because they lower attention span. I am worried that the harmful effects of social media will not seem to outweigh the benefits.

References

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