FromFrom: The Plan to Connect the Middle East

The Effects of Social Media on the Mental Health of Adolescents

A Thesis Prospectus In STS 4500 Presented to The Faculty of the School of Engineering and Applied Science University of Virginia In Partial Fulfillment of the Requirements for the Degree Bachelor of Science in Computer Science

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Introduction

Social media is undoubtedly one of the biggest technologies right now, and mental health has become one of the most discussed topics in the modern day - but is it possible that social media can affect mental health? The overall problems my STS research topics address is how social media affects the mental health of adolescents around the world. This problem needs to be studied as social media is a very popular tool of communication - it is a major way for people to keep in touch with loved ones, make friends and relationships, and even network. Adding onto that, mental health can be considered a major "why" for our behaviors - when people are happy, they feel encouraged to do good, when people are sad they may want to keep to themselves. This is where Social media plays in - it can provide a platform for harassment, bullying, or other toxic behaviors for adolescents; it could also cause addictive behaviors or other factors that indirectly affect the user's mental health (Akram and Kumar, 2017). However, it can also be a platform for jokes, companionship, and conversations that uplift adolescents, or provide some source of motivation that pushes them to improve themselves (Hamilton et al., 2020). My STS research paper will study this problem by diving into scholarly and media articles where researchers analyze different case studies about how social media affects the mental health of adolescents.

The overall problems my technical topic will address is narrating my internship experience where I got to develop a social media application called "FromFrom" for a startup company. I'm narrating this story as it provides a first-person background into the development of a social media application and the kind of components that are considered when developing

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one. It also goes into the background of how classes at the University of Virginia have prepared me for a work experience, and what could have been supplemented to additionally prepare me. My technical research paper will address this topic by describing the different aspects of my internship and my major takeaways, and how it has molded me in my career journey.

Technical Topic

My technical research addresses my internship experience developing a social media application named "FromFrom" for a startup company known as Digital Capital Solutions. It is interesting as it details the different components going into building a social media application, as well as the engineering and design process for building it. The struggles of navigating a new set of technology, as well as a completely new type of design patterns were obstacles I went through, as well as having to understand the ambiguity of building a project outside of school coursework. I also detail the design and problem-solving process I undertake, as well as the result of the project, which more closely ties in with my STS research topic. The goal of the application is to bring people together and help them make friends and relationships based on their origins. My boss and project manager is my guide for this project as well as my main point of help for describing my experience.

The problem is additionally important as social media is a massive means of communication in the modern world. Users are consistently finding social media as a place of companionship and support, or a way to stay connected with their friends and loved ones

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(Hamilton et al., 2020). Being able to build such applications provides a means for these people to maintain or build connections and can often be a tool to fight against loneliness or depression (Asmelash, 2019).

Engineers know extensively about this type of experience - building social media applications. There are many social media applications currently running, all with millions of users. Engineers have been building these applications - the different user components and displays that make the user experience so friendly and visually appealing. Engineers also build the algorithms that keep so many users attracted to these social media applications - they play a part in the suggested content that we see, that grabs our attention. This in turn, keeps users scrolling or clicking through the applications, pouring more and more time into it (Plackett, 2022). Engineers build all the trendy features that lure new users in for being fun to use or features that just allow more content to be digested quickly and to maintain constant attention. The overall point - engineers have been building social media applications for quite a while and understand what it takes to keep users attracted.

What I hope to achieve by detailing my experience is for the audience to understand an entry level point of view in developing a social media application, the design process and approach taken and what the engineers hope the social media application results in - new friends and relationships made.

STS Topic

My STS research addresses the effects of social media on the mental health of adolescents around the world. This problem is important as, stated earlier, social media is a massive tool of communication in today's world. Millions of people use social media to stay connected with their friends and family. Aside from staying connected, many turn to social media for entertainment - many social media implement algorithms to keep users on the platform, to constantly provide accurate suggested content (Plackett, 2022). Users even turn to social media as a source of income, and the current wave of past and emerging content creators use social media as their means of delivery.

The second important part of this problem is mental health. Mental health is a major driving force in individuals - the brain is a powerful tool. When humans are happy, they can become encouraged to do good things, such as donate or give a compliment. When they are sad, they may become lethargic or harmful. Poor mental health can also lead to very severe consequences, such as suicide, or the need for medications to help the mind. Poor mental health can also indirectly lead to poor dieting and sleeping habits, which then turns into poor physical health. Inversely, strong mental health can lead to self-improvement and motivation, as well as the power of spreading the motivation to others - this motivation can also lead to improved physical health (Akram and Kumar, 2017). With the importance of social media and mental health respectively outlined, I can discuss how social media affects the mental health, specifically of adolescents, around the world.

Scholars already know extensively about this problem. There are multiple studies on how social media affects the mental health of young adults in different countries, be it from interviews to medical records detailing reasons for visit (Keles et al., 2020). These studies can yield different responses, as some adolescents have detailed their experiences being harassed or bullied online, or how social media affects their physical perceptions, possibly leading to body dysmorphia or poor eating habits. Some adolescents claim that social media can be a toxic place of comparison, which can lead to anxiety (O'Reilly et al., 2018). Inversely, social media can be a place for making friends and relationships for some, where it becomes a platform for companionship and some users may find inspirational posts that improve mental health.

I plan to use different sources for my approach to this problem, a collection of scholarly articles as well as reliable media articles. Scholarly articles are the main source as they provide trustworthy information, as well as densely packed information that can be further elaborated and dissected upon. Media articles provide a more straightforward source of information as they aren't academic in nature, as well as having the possibility of containing more exciting information (as they need to sell stories). Across both of these sources, the main tools of extracting information are interviews and data detailing how young adults feel about social media on their, and others', mental health.

I plan to approach researching this problem by looking at different articles where studies have been conducted, or case studies have been analyzed already. I plan to look for consistencies in information to see where there is alignment on certain standpoints regarding how young adults feel and see where there are outlying points of impact on mental health. These sources will

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provide me with information on how social media has benefited and harmed the mental health of young adults across the world.

Conclusion

I plan to detail my experience as an intern developing a social media application that connects people based on their origins. This provided me with hands-on experience in seeing what components are considered the most when trying to bring users into a social media application and keep them interested. Ultimately, it helped me to work towards the goal of connecting people, to help make friends and relationships, as well as stay connected with loved ones.

I plan to address the problem of how social media affects the mental health of young adults around the world. Social media has undoubtedly a large presence in today's world, and mental health is a huge factor in our everyday lives; finding out how social media impacts the latter could lead to very beneficial information.

Though the technical project is complete, the overall STS topic is ongoing for as long as humans have mental health and are still using social media. I believe the problem of how social media affects mental health of young adults can be better understood by my research as I find out the benefits and drawbacks of these different applications, so that adolescents can better decide how they want to use social media.

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