

Undergraduate Thesis Prospectus

Implementing New Features to Lou's List

(technical research project in Computer Science)

Advocacy Against Social Media Addiction among

U.S. Teens and Young Adults

(sociotechnical research project)

By

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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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General Research Problem

How can technology better promote social connection?

Technology has helped promote social connection through social media, messaging apps, and video conferencing platforms. Technology used for social connection continues to increase, with over 3 billion users using messaging apps around the world (Curry, 2023) with 97% of adults owning a cell phone or smartphone as of 2021 (Pew Research Center, 2021). According to research done in East York, participants of the research are constantly looking for new ways of digital connection in order to lessen geographical boundaries (Quan-Haase, Harper, & Wellman, 2021). Technology also can increase the diffusion of ideas and information with multiple factors taken into account such as mass-communication, competitiveness, and complexity of ideas (Carley 1995).

Implementing New Features to Lou's List

How can implementing new features to Lou's List promote connectivity in UVA?

My technical advisor is Prof. Briana Morrison of the Computer Science department. In the course *Advanced Software Development Methods*, I collaborated with 4 other students to work on a project to recreate Lou's List, a class catalog website, while implementing our own unique features. Since this was a class project, several requirements and restrictions needed to be met to satisfy Professor Sherriff's specifications, which limited the choices of technology that my group had during development. The first feature that was implemented was a class schedule builder which allowed users to select courses from a catalog and build their schedules. The friend system allowed users to add and delete friends, view their friends' schedules in a calendar format, and comment on their friends' schedules. These features can be used to promote social

connectivity within UVA's general student body as the class scheduler and friend system allows students to connect with their friends by interacting with their class schedules.

Levels of depression in young adults from 2009 to 2017 (Bacon, 2022). In 2018, a program was created in order to decrease the levels of depression and loneliness that students experience on grounds. In this program, Hoos Connected, upperclassman student facilitators enroll in a 3 credit training course to lead activities and discussions for first years and transfers. Since its beginning, the program has both increased a sense of belonging and a decrease in loneliness among students. However, discussions on the use of technology for the program are lacking. The Lou's List updated web applications and their interactive designs could be the solution to help with Hoos Connected's goal of social connectivity.

Advocacy Against Social Media Addiction among U.S. Teens and Young Adults

In the US, how are advocacies striving to help teenagers and young adults prevent or mitigate media addiction?

Social media is a beneficial tool that connects people and cultures and improves innovations. However, social media can also result in negative outcomes such as anxiety and depression on its users. One research found that there was a 33% increase in exhibited depressive symptoms in a group of 506,000 8-12 graders, a 65% increase in suicide rates in the same age group, and a 30% increase in depression and anxiety in college students (Twenge et al., 2017). These numbers were found from 2010 to 2015, which is correlative to the increase in smartphone usage where 92% of teens and young adults owned a smartphone (Miller, 2018).

Psychologists estimate that 5-10% of Americans can be classified as social media

addicts (The Addiction Center, 2023), while 4.5% may be classified as at-risk for addiction (He et al., 2017). Excess Social Media Use can produce symptoms such as salience, withdrawal, mood modification, relapse, conflict, and tolerance (He et al., 2017). Health experts and advocates are working towards figuring out preventative and remedial measures against social media addiction. So how exactly are advocates working to understand and prevent social media addiction?

Resources online for limiting and preventing effects of social media addiction are limited. Articles from Providence Projects and Healthshots prescribe self-regulation methods such as “being mindful of your behavior when you are using these platforms” (Spanjar, 2023). Articles also prescribe the utilization of app freezing time limits (Kalra, 2023), which can all be circumvented by a user through 3 to 4 taps on the screen.

According to research by the Pew Research Center, "41% of teens have taken extended breaks from social media, while 26% have deleted some accounts" (Pew Research Center, 2022). This indicates an increase in teenagers voluntarily quitting social media platforms. Experts say this is often motivated by concerns over social media addiction and its impacts like social isolation, stress, depression and sleep deprivation (O'Reilly et al. 2018). Teens are increasingly recognizing social media's addictive nature and taking steps to reduce its effects.

While many American teens are quitting social media due to mental health concerns, a sizable portion continue to use platforms actively. According to a study, around 50% of teens reported using social media sites such as Instagram, Snapchat, and TikTok daily (Vogels & Gelles-Watnick, 2023). Teens also reported experiencing positive experiences such as social connection (80%), emotional support (71%), and acceptance (58%) from their friends and social circles (Vogels & Gelles-Watnick, 2023). Despite some teens experiencing negative experiences

such as being overwhelmed by drama (38%) and pressure to post well received content (29%) (Vogels & Gelles-Watnick, 2023), teens still continue to use social media.

The Organization for Social Media Safety is an advocacy group focused on improving digital safety on social media. They are directly involved in reducing and preventing: cyberbullying, harassment, addiction, hate speech, and more (Organization for Social Media Safety 2019). The group accomplishes their goals by teaching social media safety at K-12 schools, advocating for better public policies related to social media safety, and spreading awareness through their newsletter and major media outlets (Organization for Social Media Safety 2019). The group has proof of results in the form of Jordan's Law. This law deters social media motivated violence and was created when OSMS worked closely with California Legislature (Jordan's Law, 2019).

The Addiction Center is a website that provides information in order to assist people struggling with addiction, including social media addiction. The Addiction Center raises awareness of social media addiction by providing information and statistics on how social media affects the brain such as how people talk about themselves 80% on social media platforms compared to 30-40% while face to face (The Addiction Center, 2023). The Addiction Center also provides resources that people can access for free. Both The Addiction Center and OSMS help bring awareness to demographics that may not know about the effects of social media.

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