Are there adequate filters on social media to prevent cyberbullying among minors?

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IDS 300W: Interdisciplinary Theory and Concepts

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October 24, 2022

Abstract

Interdisciplinary piece addressing if there are adequate filters on social media to prevent cyberbullying among minors. As such, integrating theories from psychology, sociology, and the subdiscipline of computer science branching from mathematics helps us understand that such filters are currently adequate in mitigating minors' adverse effects of cyberbullying on a social media platform.

Keywords: cyberbullying, double-layer filter, automation, minors, social media, Child Online Protection Act, bullying filter

Introduction

While sociologists agree there is a need for automation and censorship in social media, there are also disagreeing theories because social media spaces' intent focuses on adult users. However, Sociology and Psychology provide the data and information for computer science to feed into algorithms to better prevent minors from being cyberbullied on social media. All disciplines agree that further research is needed in a fast passed internet environment, especially regarding minors' safety. Psychology argues that setting matters and presents analyses of case studies of the harm of being cyberbullied, while sociology approaches the research question with labeling theory and counters with less censorship. Lastly, the subdiscipline of computer science from mathematics is possibly more interested in the automation use of such theories. Nevertheless, such a discipline joins hands with sociology and Psychology research to create a better understanding of such filters are currently adequate in mitigating minors' adverse effects of cyberbullying on social media platforms.

Discussion

In researching if there are currently adequate filters on social media to prevent cyberbullying among minors, it comes as no surprise that one must dive into several disciplines for a comprehensive answer. Although, integrating theories from psychology, sociology, and the subdiscipline of computer science helps us understand that such filters are currently adequate in mitigating minors' adverse effects of cyberbullying on social media platforms. Disciplines like psychology, sociology, and even mathematics all agree that there is an astounding number of

users on social media, and minors are using the platforms. It is almost unfathomable to grasp how many people are using social media, but if one is to imagine the scale, think back to when the last time a person did not use it. In another sense, the standard statistic we here often is 1 in every three people. With such an enormous number of adults and minors using social media disciplines such as psychology, sociology and mathematics agree that we have possibly stepped into new territory in the conversation involving minors being cyberbullied. An interdisciplinary approach is imperative to create a comprehensive discussion.

Psychological Perspective

Setting Matters

Naturally, from an internal craving to figure out how our brains might perceive cyberbullying, the discipline of psychology lends a hand in our research. The conversation of cyberbullying revolves around setting because the setting shifts from places like schools and parks to online through a computer, phone, tablet, or both. Fortunately, there are preventative measures online to combat cyberbullying. Hani et al. (2019) literary analysis of case study trends points to a theory of innovation bringing new problems. While social media brings together people from around the globe, it has unfortunately given a platform to a “new way of bullying” (p. 703). We can define new here as the idea of being of a minor’s home computer, cellular device, and tablet being a platform for cyberbullying. This setting is vital due in part to society’s association of our place of residence as a safe place. This can be especially true with minors. Ultimately, cyberbullying changes a safe space by harming a victim just as traditional bullying does in a school or park setting. Cyberbullying and traditional bullying involve a perpetrator's intent to harm, abuse power, and repetition of said harm; cyberbullying, in essence, is no different from traditional bullying (Hani et al.,2019, p. 703). In sum, minors being affected by

cyberbullying n social media is growing, and it is a question worth diving deeper into, using disciplines such as psychology, sociology, and mathematics to form a better understanding of the question. Are there adequate filters on social media to prevent cyberbullying among minors?

Do as I say, not as I do

With that being said, another view or theory within the same discipline of psychology is one where we shift gears to analyze minors' reactions and responsibility in cyberbullying. Knauf et al. emphasize that minors' actions are often dictated by a pre-existing moral compass guided by society and parents (2018, p. 3). To put it simply, minors do as they see or as they are immersed. Nevertheless, how does this apply to create a better understanding of our research, one may ask? Like anything, there is value in examining why we do what we do and where the dos come from. As explained above, psychology has many different theories of how cyberbullying relates to our phycological interpretation. However, there is a common theme of acceptance towards further exploring preventative measures on social media. Filtering often comes up, and more often than not, there is a large amount of information and data gathered from case studies. Moreover, this information gathered from phycologists and their findings call upon another discipline to integrate our understanding.

Mathematics Perspective

Computer Science

Another way we can understand how there are currently adequate filters on social media platforms to lower cyberbullying among minors is through mathematics and, more importantly, the subdiscipline of computer science. In computer science, Sowparnika and others acknowledge they are but one piece of the puzzle (2018, p. 320). Sowparnika 2018 created an automatic filter for social media. To explain, before submitting a comment, the program will check for specific

harmful keywords. If harmful keywords exist in the text, the comment is denied and flagged within the program. Another program protecting minors from being victims of cyberbullying involves an even more advanced automatic detection program. Hani et al. (2019) create greater accuracy in improving cyberbullying detection for an overall safer social media environment (p. 707). While the previously mentioned filter uses auto-detection based on specific keywords defined by the programmer, this filter uses keywords combined with machine learning or artificial intelligence to detect and prevent cyberbullying (pp. 703-707). Nevertheless, here lies the question, how do we know what keywords cause harm to a user?

Automation

If we were to analyze this through a mathematical lens, programs would be left with blank programs. However, psychology helps programmers understand why and what words, in combination, ought to be flagged via filters. Another interesting theory presents itself in an interdisciplinary perspective from Van et al., where "automatic detection of signals of cyberbullying would enhance moderation, [allowing a quicker response] when necessary" (2018, p. 17). In other words, automated filtering of harmful word post submissions will possibly combat cyberbullying more efficiently. Another helpful program is the testing or simulating of harmful phrases onto artificial or autonomous minors. Data reveals how effective a filter is and how hurtful specific phrases or how impactful cyberbullying is in an environment where minors are not being impacted. At the same time, automation may be efficient for cyberbullying prevention on social media to protect minors from being cyberbullied. However, one may wonder what some adverse effects of filters on society or social media are and what some opposition theories are. We can bridge this conversation gap with another discipline, sociology.

Sociology Perspective

Community Involvement

One theory touches on a community approach to preventing cyberbullying rather than filtering post comments. More often than not, researchers note cyberbullying revolves in the realm of youth violence just as traditional bullying, yet happens less often, according to Smith et al. However; minors fall victim to cyberbullying more at home rather than in school or public places (Smith, pp. 376-285). With that being said, many argue that we must address our reaction as a whole in society or discuss the implications by using labeling theory before delving into automation filtering on social media to prevent minors from being victimized by cyberbullies. While using labeling theory or labeling behaviors, one solution is labeling cyberbullying as a crime and urging the criminal justice subdiscipline to include cyberbullying in its curriculum and ultimately in criminal justice lessons (Payne & Hadzhidimova, 2018, pp. 399-401). The same suggestion is made for cybersecurity courses (p. 400). In other words, criminal justice and cybersecurity majors should be taught and trained to see cyberbullying as a possible cybercrime and respond as such. One example of this intersection is seen in the cybercrime journal "founded in 2007" (p. 400). While community involvement is often a positive intervention, one could argue the community of minors using social media ought not to be a community online at all, seeing as the creation of social media was intended for adults.

Spaces Intended for Adults

While every discipline agrees on research while integrating theories from psychology, sociology, and the subdiscipline of computer science is essential, the discipline of sociology also presents an opposition to automaton in contrast to computer science's widely accepted solution to protecting minors from being cyberbullied on social media. Ademiluyi et al. conclude that

there is not enough information yet for automation to be a note-worthy tool in preventing cyberbullying (2021, p. 1). Also, there is an indication of possibly glossing over questions such as:

Who are social media spaces intended for?

Why are minors using social media?

When censoring minors via filters, are adults being harmed?

These are crucial questions to ask ourselves before moving forward. Keeping the previously mentioned questions in mind from Ademiluyi et al., a court ruling made its way to the supreme court because of these very questions.

Court Rulings Against More Censorship

The United States voted against the Child Online Protection Act "as an unconstitutional government attempt to censor free speech on the Internet," and the Court ruling demonstrates there are many less restrictive ways to protect children without sacrificing communication intended for adults" (American Civil Liberties Union, n.d.). Overall, the United States Supreme Court currently intends social media for adults, not minors. Therefore the increased censorship above what is currently acceptable is unnecessary and can arguably be seen as toeing the line of limiting free speech for many adult Americans. Fortunately, as previously stated, many, if not most, sociology studies agree that society is treading water in a high current area when it comes to cyberbullying on social media platforms, and the answers to how far one should go to protect minors may be decades from reach. Therefore, it is imperative to continue researching the phenomena of filters currently being used in mitigating minors' adverse effects of cyberbullying on social media platforms. Although a more profound discussion is happening using all of the above ideas.

e.g. Images curated from Microsoft Word 2022

Integration of Psychology, Sociology, Mathematics Perspective & Theories

While the most striking common ground between our three disciplines is a need to answer such questions as:

Are minors being hurt by cyberbullying?

How can we mitigate this harm?

They also agree that possible solutions to cyberbullying are only as good as intervention techniques. Keeping the previously mentioned agreement in mind, computer scientists create programs based on information from sociology and psychology. Without sociology theorizing how society intertwines with minors and phycology's case studies on how certain words impact minors online, computer scientists would arguably leave without data to feed into their programs. To imagine another way, picture a computer programmer sitting at a desk gathering information on new cyberbullying trends, such as keywords and harmful statements, for a filter program to delete such statements before entering a social media comment board. In gathering such

information, they often find themselves immersed in information from psychology databases. It must be analyzed and discussed to know the furthest extent of such harmful statements; therefore, the computer programmer is not alone in the thought process. Another source of information for the computer programmer will be in the sociology field in understanding if a program protects minors, violates free speech, and current court cases surrounding cyberbullying via social media platforms. While sociologists agree there is a need for automation and censorship in social media, there are also disagreeing theories because social media spaces are intended for adults. Despite social media being a place for adults, unfortunately, minors are still frequently using these platforms, and all disciplines agree that further research is needed in a fast passed internet environment, especially regarding minors' safety. With such a fast-paced environment, another way to bridge the gap of information is delving into the discipline of mathematics or the subdiscipline of computer science. Even though mathematics may not be at the forefront of minds when talking about how cyberbullying impacts minors, it is arguably one of the most enlightening tools we have to date in sifting through raw data via simulations.

To explain further, or think of another way, how do computer scientists integrate other fields such as phycology and sociology? Gathering from several articles, simulations are one of the most compelling foundations computer science provides in helping to understand if filters on social media platforms are currently protecting minors. One situation or example often used is testing which words affect minors on social media more. A computer program will act as a minor and be subjected to numerous harmful words and reactions recorded. Filters can be tested this way as well. In the simplest form, psychology and sociology may be known for asking the big questions but integrating the discipline of computer science tests the questions in real life, real-time simulations. If one were to eliminate just one of the disciplinary perspectives, the bigger

picture would lose its focus and brilliance. Consequently, integration develops a more suitable acumen of meaningful questions concerning the integration of all three disciplines.

Conclusion

While there is a typical sociologist's rejection of increasing filter and filter automation on social media because the space is intended for adults, all disciplines find a commonality in protecting minors from cyberbullying. While the techniques may be different, Sociology and Psychology put forth an essential understanding for computer science to program into algorithms for better preventing the cyberbullying of minors on social media. Even though the internet's speed of growth is almost unimaginable, the tangible is what scholars dissect best.

Using psychological analyses of setting and the actual harms inflicted on minors from case studies to sociology approaching the research question with labeling theory, community prevention and asks when too much censorship is enough—deepening the discussion even further. The subdiscipline of mathematics and computer science re-imagens the tangible through a practical if a then b, lens of such theories and data. Therefore, the unimaginable growth of the internet and social media becomes a clearer tangible discussion using perspectives from sociology, psychology, and computer science, arguably creating the premise of such filters being currently adequate in mitigating minors' adverse effects of cyberbullying on social media platforms.

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