Adverse Effects of Computing Technology and Their Mitigation:

Sexism, Racism, and Homophobia in Online Communities

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Introduction

The recent and ongoing growth of online community platforms, including social media, has continued to place these mediums as one of the primary forms of communication, expression, and news for individuals around the world. In the vast space that is the internet, these communities come in many forms across online forums, chat rooms, blogs, and voice servers connecting individuals across different identities and backgrounds. With the rise of these applications, an evolution has emerged surrounding the way that users connect and absorb information. However, these same platforms that have been used to cultivate and empower these connections have also provided unintentional opportunities for attacks fueled by prejudice and discriminatory motives to take on new forms. With the shroud of anonymity that these platforms often provide, there has been a growth in virtual attacks towards people of marginalized communities that are motivated by racist, sexist, and homophobic remarks leaving users that fall within those affected groups unprotected and vulnerable unlike ever before. As this issue grows, so does the problem with making these online communities inclusive and safe for members of marginalized groups. On the administration side, there are concerns on how to address this issue without impeding on the freedom of speech and expression in which these platforms strive to encourage and protect.

Much like evidence of hate-filled rhetoric and discrimination is seen in the physical world, the same exists in sometimes more extreme factors across virtual communities. To seek them out, one must simply immerse themselves in one of the three largest types of platforms there is: online dating sites, social media applications, and across the online gaming community. Each of these large spaces have a history and wide breadth of applications containing instances in which members of the nondominant group are unwelcomed, mocked, or even verbally attacked. One of the main causes that allows this behavior to persist is the previously mentioned "shroud of anonymity" in which these platforms can grant to a user. While one aspect of a social platform is the amount of data and information in which is provided, there is the alternative side in which platforms like Reddit and Twitter can grant a

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lack thereof using impersonal avatars and custom pseudonyms. With this possibility, users with malicious intents are granted accounts in which hateful speech can freely be expressed without the possibility of any consequences tracing them outside of that platform. Online platforms eliminate accountability, and developers of these platforms' hesitation to incorporate or aggressively target this behavior further encourages it amongst users.

       With all of these barriers in place to indirectly protect and promote sexist, racist, and homophobic behavior in these communities, there are adverse risks in which these behaviors can have on individuals who perpetuate it, bystanders who watch and ultimately allow it, as well as the numerous victims of targeted groups that suffer as a result. In the instance of the aggressor, a study of the social learning theory of aggression by Psychology Today states that "we learn aggression by observing how others act, and by taking note of the consequences" (Myers, 2007). Racism, sexism, and homophobia are all acts of abuses of power committed by individuals belonging to the dominant group. Often, these same online behaviors are witnessed by a bystander thus psychologically encouraging them to abuse that same position of power under the protection of online anonymity. For victims, this behavior has fueled an ever-rising occurrence of cyber bullying that personally attacks that individual's identity. Much like traditional cyber bullying, victims are now exposed to a deeper level of cyber threat tied by historical oppression. In additional similarity, victims in the past have suffered from depression and even suicide as a result of these attacks. To examine how these risks must be mitigated, there first needs to be an understanding of the historical factors surrounding oppressive behaviors in online communities, the growing prevalence of such behaviors with supporting research data, as well as ways in which the implicit bias of developers and companies who control these platforms contribute to the ongoing issue. Each of these factors can be separated into the three previously mentioned spaces of these communities for additional analysis.

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Online Gaming

The world of online gaming continues to be a continuously growing realm in which players across various systems and genres come together. Whether it is through online multiplayer games, community forums, or livestreaming and chatting services, there are a myriad of ways to engage with individuals who share the same interest. However, much like the industry itself, these communities are constantly plagued with instances in which racism, sexism, and homophobia continue to manifest themselves and promote barriers within those respective spaces. These instances and barriers have always been influenced by the very industry in which these communities follow.

Historically, women have been unwelcomed in these spaces as both developers and consumers. With an industry delivering products that are usually developed by majority cis-gendered white males, the representation amongst the games they created mirrored the people creating them thus appealing and providing dominance in these communities to consumers falling underneath the same identity. As of 2015, Sophie Kleeman from *Mic* reported that 9% of 76 total video games announced for that year featured a solo female protagonist (Kleeman, 2015). The remainder either featured women as part of a group or primarily solo male protagonists. Having only 22% of industry developers identifying as a woman, additional problems follow this disparate demographic in which the few instances where women are represented are often met with oversexualization or stereotyping due to male biases. This issue is even more prevalent in the representation of people of color as gaming characters, with LGBT representation in gaming being almost nonexistent. With a growing representation of these identities within the realm of gamers who participate and purchase these products, the stagnant representation in the products themselves does nothing but further empower non-inclusive practices within the gaming community. As Kleeman states for the case of women, "As long as games continue to give us significantly more stories centered on men than on women, they will continue to reinforce the idea that female experiences are secondary to male ones." (Kleeman, 2015).

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Kleeman goes on to report data from a Pew Research Center survey examining of how welcoming different online environments are against men in comparison to women. Out of all the listed areas ranging from website comments to online discussions, the online gaming community got the highest vote of 44% reporting that they felt it was more welcoming to men in opposed to women. There is little mystery as to why that is. In examining different pockets of the community, women are often met with abuse and offensive remarks. Just as their characters are oversexualized in the games they play; female gamers are often met with sexual remarks whenever encountering male community members. In addition, they are subject to discrimination in even joining some of these communities, offensive exchanges undermining their skills and abilities to match the level of their male counterparts, in addition to other misogynistic remarks questioning their right to exist within these spaces.

Sadly enough, a comparable level of abuse in which female gamers face can be attributed to people of color and LGBT members entering this space for historically the same reasons. In fact, the casual use of racial remarks and homophobic slurs have almost become synonymous with the culture of "trash talking" in online gaming. With the resurgence of competitive games such as Call of Duty, racist and homophobic gamers refuse to be shy in making their presence known within these spaces. For the average marginalized individual participating in these communities, it is difficult to not be met with a username, tag, or even vocal remarks incorporating the use of the N-word or F-word under the camouflage of competitive spirit. To add further emphasis on the severity of the situation, similar slurs are often referred to as "gamer words" when used under this context.

Attributing prejudicial abuse with the gaming community speaks volumes as to who is welcome in that community. When discussing the nature of trash talking and competitive slang, you rarely encounter instances in which the common remarks are made to attack the identity of the dominant community. Although publishers and companies work to verbally discourage this behavior, more can be done to mitigate and direct more inclusive practices. The primary

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system of accountability that is incorporated is profile reporting. In doing so, this places the responsibility of the affected party to call out the actions of their offender and bring consequences forth themselves. When these forms of encounters are as common as occurring in just about every lobby, this decreases the value in which reporting an instance may actually have. As developers of these games and the chat-based platforms that unite their community, additional diversity and inclusive practices need to be brought into their creations. First, this may start with a diverse development team that would naturally lead to proper representation and effective design principles within products that keep these risks against members of targeted communities in mind. Naturally, this should lead to more innovative and effective community policies that disrupt this behavior as it is happening. Ideally, this would include but is not limited to a more efficient in-game profile reporting system that is less of an inconvenience to use, chat algorithms that monitor and take action against harmful slurs and associated or substituted dialogue, as well as in-game characters and stories that empower targeted identities and work to reverse a harmfully toxic culture.

Social Media and Dating Applications

Whenever news of such intervention with the intention of holding discriminatory offenders' accountable hits media platforms, it is often dismissed with the term as being an unnecessary agenda of "Social Justice Warriors"—alternatively known as SJWs. This very pushback reveals another much needed focus on this other form of online communities in which this same type of identity-based targeting is committed. Serving as the root and primary medium for general cyber bullying, online social platforms continue to be riddled with racist, sexist, and homophobic practices as their reach continues to grow.

Two of the largest social media platforms, Twitter and Facebook, have a history of open biases and lack of protection for people of color using their platform. With both companies following the trend of a lack of diverse representation among their developers, the very policies and systems that they have established in attempt to reprimand offensive behavior is instead

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tailored towards working against the very people in which this behavior targets. Naturally, as a large platform that emphasizes communication and expression, their user community is met with racist, sexist, and often homophobic motivated pages, posts, and content. However, Facebook has been actively reported as being more aggressive in punishing and removing content created by people of color speaking out against racism than the very post committing the offenses.

In one primary example regarding Facebook, a Black woman encountered a post discussing a racist statement made by actor Liam Neeson. In response, the woman decided to share the post with her friends to speak out against Neeson's problematic statements made in the post and its anti-black racism. Instead of policing or censoring the post in which triggered the woman in defending her community, the woman's post was instead the one to get removed due to violating Facebook's community standards for hate speech by calling out common racism fueled behavior within white men. The USA Today article by Jessica Guynn covering this occurrence made a summarizing remark stating that the post was "just another example of Facebook arbitrarily deciding that talking about racism is racist" (Guynn, 2019). Through other similar experiences and stories, there is an abundance of evidence in Facebook's algorithms and content moderation systems containing biases that limit and police the experiences and expressions of people of color and activists advocating for social justice. However, there is a lapse in comparable moderation in posts with the intent of harming those communities including those who fall under the woman or LGBT identity.

Following the same pattern of the gaming community, the lack of accountability and consequence for abusers on these platforms are fueled by the implicit biases set forth by people who create them. When you are not a person of color or a woman developing a content moderation system to protect those communities, it is difficult to dip into the experience of those identities and effectively identify content that may be harmful to them. It is, however, easy to incorporate methods that control content mirroring the idea of "reverse racism" or challenges the behavior of members of your own identity. A platform with the stature that

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Facebook and Twitter have should require the proper responsibility of self-reflection and assessment to recognize that it is problematic to remove content by activists and marginalized communities. This is especially true when the purpose of those posts are to speak out against discrimination and social injustices in opposed to content that actually perpetuate the behavior they're seeking to abolish. As a result, it inadvertently enables and encourages this behavior amongst its abusers and leaves the affected communities unprotected and undervalued.

Another unconventional medium of community abuse through social media platforms is the lack of protection surrounding advertisements and promotions that are shown. As most social media platforms make their revenue through advertisements, there have been certain instances in which generated advertisements have stereotypically targeted certain communities or presented them with false information to persuade them in their favor.

Putting Facebook in the spotlight once again, the perfect example of this situation would be the Facebook Cambridge Analytica Scandal. In 2015, Facebook allowed a data analytics company called Cambridge Analytica to retrieve data of 250,000 users under the protection of Facebook's third-party application policies during that time. Cambridge Analytica turned out to violate that policy by using their personality-focused surveys and formulated questions to gather additional information on connections and friends of participating users, thus bringing their number of collected users to 50 million. After being contracted by President Trump's campaign in June 2016, the firm began targeting those same millions of Facebook users with political ad campaigns in Trump's favor using curated and factually questionable campaigns unbeknownst to users. The secret, as reported in a Slate article by April Glaser, is that the data firm used psychographic targeting that permitted the company to "create psychological profiles to `effectively engage and persuade voters using specially tailored language and visual ad combinations`" (Glaser, 2018). In other words, the ads used data to target and curate content that appealed to personal dilemmas of a user thus swaying their vote in the election. This method placed all people of underrepresented populations at risk, as it gathered their data without permission and presented them with potentially false content.

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Their data was abused in efforts of appealing to their needs and voting for a candidate that could bring harmful policies to their communities, much in contrast to what the advertisements may have conveyed to them. While this is only one example of the improper use of data in harmfully manipulating marginalized communities, there are a variety of similar instances in which harmful content of individuals use the same unethical practices.

When examining the spreading of data and use of advertisements across social media platforms, it further shows how these platforms have served as a more efficient method in the spreading of information amongst its users. While this has been proved extremely positive in the announcement and communication of world news and through marketing practices, this has proven especially harmful in the fast spreading of false information. Returning to methods in which the users of these platforms can directly be the ones to cause harm, there is the concept of going viral online in which a piece of content created by a user surges in popularity and is seen across a single or multiple platform. There are often in which individuals on these platforms with major influence or political figures—who have more potential to go viral and have their content spread—have misused their influence in promoting misogynistic, racist, or sexist remarks. The viral nature of the content may cause it to unwillingly enter the space of affected individuals this irresponsibly causing emotional harm and making those affected identities feel unwelcome within that platform.

In addition to information spreading across online communities, we have the presentation and query of data that is presented online. An article by Mariska van Schijndel in *Diggit Magazine* highlights examples of problematic ways in which this manifest itself within online dating platforms geared towards helping promote interracial relationships. With online dating being a popular tool for individuals to meet and connect with one another on a more private or intimate level, some tools are built with implicit biases causing microaggressions against the very populace in which they aimed to serve. Schijndel first accounts on how Google searches and online queries mostly show White couples whenever searching any couple-related

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term that doesn't denote a specific race such as "Black couple." She mentions this influence as "Small probes such as this one, suggest the online dominance of Western norms and white people" (Schijndel, 2018). When carrying this argument into the realm of interracial dating platforms, most platforms do little to counter or prove it wrong. While acknowledging that interracial-seeking individuals are a niche interest within themselves, images and verbiage included on sites such as "afroromance.com" promote "love beyond race" while only showing images of black and white couples and containing slogans that explicitly promote the same. Again, the pattern of representation continues as most of the popular sites, including the ones that Schijndel details in her article, all point to an improperly execution of an already problematic niche that further promote the feeling of "otherness" through its use of exclusive imagery despite alluding to inclusiveness in using a word like "interracial." Some sites only focus on the Black and White dynamics of interracial dating. Other sites try to promote intercultural identity by focusing on ethnicity but improperly associating ethnic factors with visual appearances rather than culture and origin of birth. In the case of these niche dating sites, they promote false information and stereotypes that further divide despite their claimed intention of voting. Rather than serving as a general dating site that allows the individual to do the choosing of physical traits themselves, they almost choose for their users by placing them in a box. As Schijndel states regarding this issue, "Furthermore, the love for certain stereotypes is not merely an individual feature. Instead, it is part of a wider, socially shared discourse…" that ultimately promotes the division and fetishization of racial and cultural differences (Schijndel, 2018).

When pursuing a mission of connecting people across differences and locations, it naturally comes with the complexities and nuances of ongoing issues that already plague our society. In developing and creating the systems that wish to engage in this work, it is important to anticipate and research some of these associated risks that include the ones previously mentioned. While some are hard to avoid, it truly takes a diverse, openminded, and inclusive team to effectively mitigate these issues which is why it is important to have a team that demographically represents the end users in which it aims to serve. When thinking of how to

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approach ongoing issues regarding social platforms, it requires an effective balance of both foresight and decisive action.

First, when developing a tool that wishes to leverage social expression and empower connections, there must be an effective plan in place that protects and empowers all individuals who use it. While at one point, Twitter was in the same place as Facebook in how loosely it managed the occurrences of online abuse to prosper on its platform, it has learned from its mistakes recently. Twitter has incorporated new features that stray away from trying to necessarily silence or control the voice of its users, but instead empowers them to control the content that they come across. A part of this feature is the ability for a user to hide potentially sensitive content from their timeline. Using algorithms to scan content for harmful or offensive language, it measures a Tweet by its potential severity and automatically removes content that is blatantly abusive (uses harmful slurs, body shames, or enforces misogynistic beliefs) and marks questionable ones as sensitive so that it is hidden from users who have the feature enabled. Users, at their own risk, are granted the ability to individually view blocked sensitive tweets, but not before seeing a clear message denoting it as such and why it has been blocked. The second part of this feature is the ability for a user to mute words. This is a highly effective idea for the fact that it allows the user to take their censorship into their own hands. Although Twitter has been working to eliminate workplace bias and incorporate inclusive practices into its development, this feature allows any gaps of uncertainty from its moderation system to be handled by the user themselves. In doing so, the user can create a custom list of content containing exact words or phrases that they wish to hide from their timeline. An additional feature to support these two self-moderation methods Twitter's robust block and mute system. This feature allows for custom moderation of content belonging to an entire user and potential interactions that may be had with them.

While Twitter is still not the perfect platform, it has taken great strides and responsibility and making sure that it fulfills the goal of empowering all its users as well as

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ensuring that its users share the responsibility of censorship with the users themselves. Through this method, they acknowledge that they won't be able to magically make their platform a happy place for everyone on their own. More online platforms including Facebook and Instagram should follow Twitter's footsteps in this practice rather than trying—and failing—at leaving this work to complex algorithms and autonomous systems that don't cover the needs of their wide array of users.

In addition to content moderation within itself, companies creating and supporting these platforms should take initiative in teaching themselves various nuances that may follow the community that they are attempting to build on their platform. Referring to the dating sites from before, this also level of self-consciousness also includes unhealthy practices in which they may be promoting within their community as well as any potentially harmful behaviors and miseducation they'll be promoting. In a similar Case to Facebook, this can also include paying closer attention in how they manage, promote, and spread data and information amongst their site as well as the associated parties that they lend it to. Both the company and its developer must be proactive in finding ways to protect its users as people on their platform, especially marginalized identities with a historical record of oppression and abuse, are placing themselves in a further vulnerable position through the data that they provide and in the promise made by the company for the ability to express their most authentic selves at all times whilst using the platform. Amongst these concerns, developers of these systems must also continuously be aware any data that they use for search queries and the implicit meanings or biases that they may possess using traditional search methods.

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Conclusion

As the complexities in an ever-growing and diversifying society continues to grow, the software created to uplift it and the approaches to creating this software must continue to grow with it. Across the world, the presence of racism, homophobia, and misogyny possesses many forms. With the internet containing an equally comparable size of vastness and complexity, so does the presence of abuse against the people across these different identities who use it. It is time to take responsibility in the roles that are played to enable abusive attacks, promote identity-based stereotypes and biases, and disrupt the safe spaces online for individuals in which these tools were created to serve. While incorporating that level of self-awareness and revamping policies to take this matter seriously, a special eye must be directed towards the history in which people across underrepresented race, gender, and sexuality systematically oppressed and the risks that evolving technology can raise in creating new forms of alienation and oppression if left unchecked and unaccounted for.

It is diversity and inclusion within the field of technology that has progressed technology to where it is today. In contrast, it is the ignorance of inclusive practices and abuse that will stunt its growth. Even the pioneer of early computing, Alan Turing, was identified as homosexual but despite his contribution to the field, he was ultimately punished for his "otherness" that existed within that space. This same feeling exists for certain individuals across all spaces within online communities—including social media, gaming, and networking platforms. Since the research behind the causes, experiential accounts, and history is right in front of everyone, both innovators and consumers in the field of technology must learn to look outside of their own lenses in order more adapt ethical practices as they continue to move forward in changing the way in which we engage and connect with the world, as well as each other. While it is fine for developers to aim to both elevate and empower individuals with these platforms, they must also have a proper understanding of both the positive and negative ways in which they empower those who use it. (Glaser, 2017)

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