Exploring the Impact of Technology on Trauma in Rural and Marginalized Youth



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#### Abstract

The Internet is a worldwide system of computer networks that can be accessed remotely through technology such as smartphones, computers, tablets, and many more. As the world increasingly relies on technology, analyzing how it impacts different demographics is vital. The negative influence of technology on marginalized youth is readily apparent in the modern, technology-driven society, and its repercussions persist among children facing disadvantages stemming from economic, political, educational, and social factors. These children suffer symptoms of isolation, poverty, and discrimination which can lead to negative consequences in development. This technology has the potential to either exacerbate or alleviate the trauma these demographics risk facing. The result can be determined by conducting a thorough analysis of these conditions through meticulous research and establishing well-organized assistance for these neglected communities.

## Trauma Faced By Rural Youth

Youth in rural and underprivileged communities may face more trauma as a result of technology in several different ways. Trauma results from "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life-threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2014). Statistically, a rural community is an area with a population of less than 2,500 and a population density of fewer than 500 people per square mile, according to the U.S. Department of Agriculture (*What is Rural*?, 2019). Accounting for 15% of the U.S. population according to the United States Census Bureau

(About Rural Health, 2023), 13.4 million are rural youth (New Census Data, 2016). Characteristically, these children suffer from unique symptoms of isolation, poverty, and discrimination, in addition to having limited resources and complicated relationships with the technological and outside world, placing them at a significant disadvantage.

Rural and marginalized youth have overlapping issues regarding mental health, trauma, and their environment. These areas are at a higher vulnerability level for disasters due to numerous factors such as poverty, geographic isolation, a decreasing population, weaker planning, and a weaker administrative capacity, as noted by the U.S. Department of Agriculture. They also often have considerable health disparities when compared to urban and suburban areas. Children and families within these communities have higher rates of family instability, an increasing number of single-parent households, or children raised by their grandparents, and they are likely to receive less attention (Clark et al., 2022). A recent CDC study established that children in rural communities with mental, behavioral, and developmental disorders face more community and family challenges when compared to urban and suburban children under the same circumstances (*About Rural Health*, 2023).

Rural youth fall under the umbrella of what is considered marginalized youth. The nation's marginalized youth is the broader community of the two and consists of children who are disadvantaged due to economic, political, educational, and social factors. Aspects contributing to the systematic factors that lead to these children's disadvantages are out of their control. Specifically, this community includes children who live in poverty, are in the juvenile or welfare system, have a disability, are within the sexual minority, have retained undocumented immigrant status, and so on (Sapiro & Ward, 2019). While being subject to discrimination based

on their racial, gender, and immigration identity, they often have minimal access to education, training, and productive employment, which makes them socially and economically disconnected and unassimilated (*Marginalized young people*, 2020).

The two communities share many commonalities, especially regarding their isolation from society. With overlapping issues of family instability, declining economies, lack of higher education and employment opportunities, and secondary health services and mental health facilities, both communities need additional support to integrate into society adequately and are no longer at a disadvantage. To give this support, it is important to understand who needs it and what they need. Social acceptability and access to resources are the two significant focal points to equal the playing field between the groups. This can be done through technology, which has the potential to eliminate isolation, lessen discrimination, and create more accessibility to resources and education.

### How Technology May Contribute to Trauma

There are several methods where the use of technology has the potential to make the traumatic experiences that young people in rural and disadvantaged regions already experience worse. Many rural and poor young people do not have access to proper mental health resources, which might contribute to higher distress if they resort to online self-help instead of getting professional assistance. Additionally, using online media such as social networking sites and other platforms may lead to an increased risk for cyberbullying, which can be devastating and lead to feelings of isolation and powerlessness among rural kids. This is a problem that is exacerbated by the use of online media.

It stands to reason that technology can have a retraumatizing impact. Reviewing news and graphic content can lead to individuals associating what they see or hear with a real-life event or experience. Viewing this content can cause trauma survivors to relive what they have experienced. Equally important is the overstimulation that can come with reliving a traumatic experience or from the general consumption of technology and social media. The internet gives large amounts of information all at once, and attempting to consume and process that quantity can overwhelm those living with trauma. Those without trauma will likely process the data and the pressure that comes with it and transfigure it for benefit without much trouble. However, those with trauma often experience adverse symptoms from trying to do the same, becoming stressed and fearful, disassociating, experiencing disembodiment, and feeling exhausted or overstrained. (Hübl, 2018)

Unhealthy usage of technology by trauma survivors and those with mental health disorders can also lead to disarray as technology can become too pertinent in their day-to-day lives. With the technological world advancing, problems of overuse have also arisen. Extended technology usage and traumatic stress may lead to new disorders and addictions (Hübl, 2018). When children are experiencing troubles in their real lives, it can be easy for them to use technology as a distraction, which can become concerning. This can lead to children developing internet gaming disorders and addictions to social media, smartphones, and the internet. This places rural youth more at risk, who are more likely to indulge in escapism due to the scarcity of extracurricular activities in their environment. It is vital that this issue be recognized and structured limitations are set in this upcoming age of technology and its integration into the younger generation.

Children suffering from trauma or traumatic stress have trouble relating to others and creating attachments, making them more vulnerable to child exploitation via the Internet (*About Child Trauma*, n.d.). Due to the isolating elements in their areas and traumatic experiences without regulation of online usage, the children of discussion are highly susceptible to online grooming and becoming victimized through internet crime. With child exploitation, sexual and otherwise, on the rise due to youth using the internet and social media as new platforms, it is essential that trauma survivors do not fall victim. If exposed, increased isolation can equally pertain to cyberbullying and the children's vulnerability. Additional trauma symptoms such as depression and severe and continuous emotional turmoil can lead to a higher level of isolation and loneliness that children will likely experience if bullied while already in an unstable mental state due to their situations (*About Child Trauma*, n.d.).

If cyberbullying were to also occur, it could lead to more detrimental damage. Rural youth are more vulnerable to experiencing cyberbullying due to the circumstances of their situations, which already leads them to be outcasted by society. Child exploitation and cyberbullying can lead to additional isolation from society, and so can internet access. Children may overuse their internet access, which can mean declining involvement in social activities like clubs and sports, which are recommended for healthy development. Internet access may also lead to declining interpersonal connections and social skills. Although social media exists, it is still not the equivalent of real-world connections and relationships. There must be a balance between the two for optimal success in childhood and particularly for later adulthood. When keeping these factors in mind, it becomes easier to strategically avoid adding any additional stress or

adverse effects to these children's lives. These kinds of possibilities that can come from the internet are the opposite of the type of support that children need from society.

# How Technology Can Alleviate Trauma

On the other hand, technology can be a helpful instrument in healing and rehabilitation among young people who live in rural and underprivileged areas. It has been discovered that mobile apps customized to match the requirements of teenagers in these locations are beneficial in lowering trauma and anxiety symptoms in adolescents. Additionally, it has been shown that participating in online support networks for traumatic situations may help young people cope with the effects of trauma and improve their overall well-being.

Technology has the potential to be an effective medium for bridging the gap between underprivileged and rural kids and the resources and help available for their mental health. For instance, virtual therapy and telehealth may give young people access to mental health services regardless of location. Virtual reality (VR) technology may also be an excellent tool for linking rural adolescents with therapeutic services, such as exposure therapy and guided imagery, which can help them deal with various mental health issues.

Technology also has the capability of being a valuable tool in solving problems in accessibility for marginalized communities. When youth experience trauma, the first line of defense should be to obtain counseling from trained professionals. However, those in rural communities may not have the same access to trauma-informed, quality counseling due to questions of access and economic conditions. The National Rural Health Association (NRHA) reports an unequal distribution of mental health providers in rural communities compared to those in urban or suburban communities (NRHA, 2022). Residents report having to travel at a

farther rate to access health services, which can cause a significant financial burden and calls into question methods of general access to health services. This can be solved through two measures, increasing access to telehealth and counseling services and supplementing trauma-informed counseling programs in educational and other youth programs with the necessary training to handle the conditions of the relevant communities.

Trauma Informed Care (TIC) is the calculated approach to trauma within communities by adapting and implementing measures that respond to their experiences within the contexts of their environments and needs to better supplement and treat patients. TIC is split between three tiers; 1) Universal Dissemination, 2) Targeted Dissemination, and 3) Individualized Dissemination. Tier 1 typically prepares participants (such as program leaders, students, teachers, etc.) to be educated on trauma and other extenuating circumstances. Tier 2 is more focused than Tier 1, offering structured programs to those who are more susceptible to experiencing significant trauma (such as those in unstable socioeconomic conditions). Tier 3 is the most extensive, aiming to treat those who have experienced trauma (Racine, 2020). Compared to the other tiers, individualized dissemination is more comprehensive and offers an in-depth treatment of post-traumatic experience.

Regarding youth intervention, advocates for this model have pushed for its implementation within educational institutions. Schools often serve as the forefront of resources for marginalized youth who may not have the access or resources to get mental health assistance. Relevant literature has shown that TIC effectively reduces the symptoms caused by traumatic experiences and fosters an accommodating atmosphere for those at risk of experiencing trauma.

Thus, implementing trauma-informed programs in educational institutions increases the ability of afflicted youth to be more supported in navigating their respective spaces.

Technology can increase the rate by which trauma-informed care can be accessed through the additional layer of telehealth services. Telehealth is the monitored medical use of audiovisual technology to offer psychological, physical, or therapeutic interventions through a secure internet connection (Racine, 2020). Telehealth services have increased in use since the emergence of the Covid 19 pandemic, where the need for sheltered life was central to sustainment at the time. Although the concept is relatively new, evidence shows that telehealth is just as effective in treating cognitive and behavioral illnesses in youth compared to in-person treatments offered at medical offices, alongside reducing the rate at which youth may drop out of mental health programs because of external circumstances (Racine, 2020). Additionally, it relieves the issues of using resources to attend treatments by making access easier. In a more digitized age, this brings up opportunities for providing modern and more accessible health care to communities that may experience barriers due to their conditions.

Community building is integral in supplementing trauma-inflicted youth in their development. During their development, youth often seek communities where they communicate with like-minded individuals to process their environments and general well-being. In modern times, this is often found through social media and web communication due to the readily available nature of smartphones and computers. Youth may often seek out others who share their interests online and create and build relationships where they feel safe and supported. This creates digital "safe spaces" where youth create online communities offering refuge and places to engage with peers. These spaces are still debated due to the risks of unstructured youth

engagement leading to potentially harmful interactions. However, it can be argued that through proper guidance and moderation, safe online spaces focused on building peer support of traumaafflicted youth can help alleviate trauma due to shared conditions leading to stronger connections and understanding. For example, A study on creating an online support group for youths with eating disorders showed positive results in developing companionship (Kendal, 2017). In this study, adolescents that struggled with disordered eating alongside other behavioral illnesses could form an anonymous online community through the monitoring of medical professionals where they offered encouragement and shared stories where they could relate to others' struggles more closely. Due to the nature of trauma, the disclosure of personal struggles often becomes a barrier to seeking treatment, which safe online spaces have the potential to resolve due to the structure placing less pressure on the participants and the knowledge that those involved shared similar experiences. Although this study was mainly focused on eating disorders, there is a market that would prove beneficial in supplementing trauma-afflicted youth development in a digital age.

# What Solutions Can be Implemented?

As the world continues to grow more reliant on technology, examining how that may serve youth as a positive tool to encourage online safety is imperative. Relevant literature on child exploitation in an online space emphasizes the importance of digital literacy to assure the security of vulnerable groups from exploitation. Marginalized groups, such as predominantly lower income, face this vulnerability due to the inability to have regular, safe, and continuous access to technology to develop online literacy.

Cyberbullying is a heavy contributor to the endangerment of online youth. Because of the widespread unmitigated conditions of internet access, such as smartphones and computers, under the guise of anonymity, bullying becomes challenging to track online. When individuals become victims of cyberbullying, they become increasingly isolated and have more of a difficult time developing integral relationships within their peer groups. This can be exacerbated in rural and marginalized communities with a more small-scale and interconnected social network and could exacerbate rural youth's conditions (Cabrera, 2022). Essentially leaving them isolated and having difficulty making integral healthy connections and relationships that would assist in their development. Therefore, it is crucial to advocate for funding to support anti-cyberbullying programs. General anti-bullying programs have shown to be successful in reducing the rate of cyberbullying by up to 20% (Gaffney, 2023). Youth can engage in a healthier online space when strengthening that element in an online context through more focused practices. It can form healthier relationships online without feeling at risk of harassment or bullying. When youth feel more supported socially, this will reduce their likelihood of engaging in risky online behavior and will give them more access to social resources, and increase literacy by reducing possible risks they might encounter.

Digital literacy is "a subsection of "media and information literacy" that encourages the ability to find, identify, evaluate, and use information effectively." Most internet literacy is found in regular interactions with the online world. Through computers found at home or another location, individuals log on and access the broader internet, and more experience leads them to navigate the online space more proficiently. However, this passive learning does not come equally for all. According to the Pew Research Center, compared to suburban and urban

communities, rural communities face less accessibility and connection to the broader internet (Vogels, 2021). So although initial internet access is essential for educating digital literacy, the levels of how they experience this are different due to the varying conditions of different communities.

The central objective is to gain a more structured approach to the issue. This can be done through government-sponsored public educational programs that promote digital literacy in these communities. Public education programs like the Youth For Youth program would be a good example. These programs promote online safety and educate youth on the risks of surfing the net without proper guidance. They encourage critical thinking on information that youth may encounter online and offer informational content that would aid in ensuring safer internet use. By pushing for more programs with digital literacy at the forefront of their intent to educate, opportunities are created to educate youth on proper internet etiquette and prevent the risk of victimization by pushing for more informed decisions. This is especially relevant in modern contexts, in a world where tech literacy grows more and more essential in a post-pandemic world.

Technology also has the potential to provide young people living in rural and neglected areas an avenue for their creativity and expression. For young people dealing with traumatic experiences, one helpful way to cope is to express themselves creatively by producing artwork, music, and other media types. Through the use of digital tools, this coping mechanism becomes more accessible to those groups. Additionally, while there may be restricted access to physical locations for activities such as group work and sports teams, technology may give additional possibilities for meaningful activities such as podcasts, online courses, and virtual clubs. It is

possible for online activities such as blogs, social media campaigns, and the promotion of mental health literacy to contribute to reducing stigma and creating increased awareness about mental health in these regions. Additionally, internet platforms that educate about mental health and support recovery may benefit young people living in remote areas or underprivileged communities. Introducing stimulating subjects to adolescents, can assist in building and fostering healthier habits that can contribute to their continued well-being.

In conclusion, technology has the potential to play a significant part in helping to eliminate the stigma associated with mental health among young people living in rural and underserved communities. Those living in rural areas have limited access compared to urban and suburban communities. This divide creates a unique circumstance for adolescents in these areas due to the extenuating conditions making them more at risk to experience traumatic situations. Technology has the potential to exacerbate that by increasing the risk of exposure to harmful content and internet-based addictions. However, this varies depending on the context in which it is being utilized. Unmitigated internet access is harmful, but it can also be a great asset in relieving the trauma these groups face through remedial efforts such as telehealth services and digital safe spaces. This topic is something that is still in its early stages of research and is still heavily debated. It can be deduced universally that any tool when mishandled will lead to negative consequences and vice versa. Through further exploration, the digital world can develop into a more structured and safe space for youth and everyone overall.

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