

Perspective From Marginalized Voices: How Young Adults on the Autism Spectrum Interact with Social Media

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Privacy education has been found to be effective for autistic young adults, a population at increased risk of online harms. One contributing factor to these exacerbated harms is that many social supports available to autistic youth decrease once an individual legally becomes an adult. Interestingly though, studies show that autistic teenagers are less likely to participate in risky online behavior, which may be due to their social support involvement. Previous research shows the invaluable asset of support networks in helping autistic teens have more successful outcomes during their transition into adulthood. Given this, our goal is to redesign our online safety educational intervention, originally developed for autistic young adults, to effectively reach teens and their support networks. However, we are aware that traditional restrictive methods, such as limiting certain technology or parental controls, for online teen safety are not as successful compared to designs made by and with teens. As such, we believe that this workshop will provide us with an invaluable opportunity to learn how to best adapt our materials to serve this population and their support network before future privacy harms are experienced.

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1 INTRODUCTION

Research has shown the importance of social media and its ability to provide social connection to autistic young adults (YAs) [5, 10, 12, 16]. Since autistic YAs are more prone to social isolation [8] and transportation issues [9], social media is able to facilitate online interaction for these individuals that may not have been accessible otherwise. However, despite this social benefit, there are disproportionate harms that young autistic users face like cyberbullying [15], privacy violations [16], and different perceptions of social media affordances compared to the general public [12]. Previous work has found that the exasperated harms are due to differences in the perceived affordances of social media features [12]. For instance, autistic YAs may be more likely to interpret features, such as “friend requests” literally leading to unsafe disclosures.

As a response to these harms, we have developed an educational intervention for autistic YAs, targeting transitional ages of 18-30. A goal of this work was to see if our intervention could successfully improve learning outcomes for autistic YAs in managing their privacy online. Thus far, the intervention has been deployed for the past 2 years at a local residential facility for autistic YAs who require level 2 substantial support needs and is shown to have successful

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learning outcomes. However, many of the participants involved have already experienced severe online harms prior to the intervention. This may be because of a decrease in social support and services that are available to autistic YAs [8]. Past research has shown that though autistic teens are still affected by cyberbullying and social isolation, they are less likely to have risky online behavior [14]. This could be an effect from their social support network who are heavily involved in creating and maintaining strict online rules in anticipation of such online harms [7]. In order to be more proactive and mitigate these online harms, we seek to deliver this intervention to teenagers. We are exploring how support-network involvement, along with our evolved intervention, can prevent future online harms.

2 OUR PRIOR WORK

2.1 Methodology

Our educational intervention was designed by a multi-disciplinary team with the following goals: A curriculum that was accessible in reading level and utilizing best practices in autism research. This includes incorporating members of the university autistic student association as volunteers to interact with our materials and researchers specialized in special education. The curriculum has 6 modules: (1) the norms of social media, (2) choosing safer privacy settings, (3) how to identify fake profiles, (4) types of social groups on social media, (5) appropriate interactions based on social groups, and (6) distinguishing social media vs. reality. These topics were chosen in response to previous work [12] that highlighted specific areas of friction that autistic YAs experienced on social media, as well as other privacy curriculum literature [4].

Currently, the intervention is given at a residential facility that supports transitional aged autistic young adults. Over the past 2 years, we have had 23 participants take this course. The curriculum is 14 weeks long, meeting once a week for 50 minutes. Each module starts with a pre-knowledge assessment and ends with an identical post-knowledge assessment. These pre and post-assessments are then analyzed to determine knowledge growth. The following week after a module, we conduct a review lesson. We review the material with activities and hold 1 on 1 interviews to discuss each participants usage of social media over the past week. All lessons are audio-recorded to understand correlations between participant engagement and learning outcomes.

2.2 Results

Our results show that 4 of the 6 modules (social media norms, fake profiles, social groups, and appropriate interactions) significantly improve learning outcomes. Specifically, there is an average significant increase of 13 percent between the pre and post assessment scores for these modules. The other 2 modules (settings and social media vs. reality) have no significant difference. As there were less participants who took these 2 modules than the others, this may be due to an underpowered sample. Of the successful modules, all of them incorporated rule-governed behaviors.

3 ADAPTING PRIVACY EDUCATION TO BETTER SUPPORT AUTISTIC TEENAGERS

The goal of our previous work was to effectively teach YAs how to use social media safer. Our results indicate that most of the modules successfully teach safer privacy practices and that our participants are achieving significant learning outcomes. The successful modules incorporated rule-governed behaviors, which are a set of rules that are applied to a variety of situations and have shown to successfully educate autistic individuals how to navigate life experiences [3]. Our findings indicate that more utilization of rule-governed behaviors may be an effective way to teach autistic young adults how to make safe online decisions.

While our research has shown successful learning outcomes, it is important to note that previous research has found that during young adulthood, autistic individuals are already exposed to online harms [5, 12, 16]. Interestingly though, work has also found that autistic teens may be less likely to participate in risky online behavior due to support network supervision than their neurotypical peers [7, 14]. Unfortunately, during the transition to adulthood, autistic individual's existing social support network decreases [2, 6, 8, 11, 13]. Autistic YAs yearn for such social interaction, yet report few social relationships and struggle with social events [6, 8]. When social relationships are made, studies show that the friendship is less supportive or close compared to the general population [11]. During this transitional time, a case study found that poorer outcomes for autistic YAs were due to insufficient professional attention and limited understanding of individualized interventions for autistic individuals [13]. This could indicate that without strong and knowledgeable social support services dedicated to autistic care, autistic YAs may be more at risk for privacy violations.

In a response to this, we want to proactively modify and deliver our intervention to autistic teens and their support services while they still have access to them. Research shows that social support network for autistic teens during transitional time is crucial as they facilitate a successful transition into independent living and provide a higher quality of life [13]. However, we are aware that social supportive restrictive methods, like limiting technology or parental controls, are less beneficial for the safety of general teens online compared to a design that is centered around teen involvement [1]. As such, we are interested in exploring how to co-design an intervention that integrates autistic teens and their social support networks to better address online safety needs.

4 CONCLUSION

Since our intervention has seen success in providing online education to transitional age young adults on the autism spectrum, we are hoping to provide a similar intervention to teenage autistic individuals. Research shows that this can be particularly helpful in educating teenagers while they still have a stronger support network. This, in turn, can help mitigate privacy violations and harms online well before they reach a transitional age. We believe that this workshop will provide invaluable information as we navigate this research and will provide discussions, ideas, and strategies that will help build our foundation for an online educational intervention for autistic teens.

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