



B32 Assessing the Relationship Between Asperger Syndrome, Hacking, Identity Theft, Virus Writing, and Cyberbullying

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After attending this presentation, attendees will have a better understanding of the relationship between Asperger syndrome and computer deviance, specifically hacking, virus writing, cyberbullying, and identity theft.

This presentation will impact the forensic science community by filling a gap in the literature on the autistic-like traits associated with different forms of computer deviance.

Anecdotal cases suggest a potentially unique relationship between Asperger syndrome (AS) and computer deviance, particularly hacking.¹⁻⁵ However, few empirical research studies have attempted to assess this Hacker-AS link. In addition, previous research does not distinguish between individuals engaged in different forms of computer deviance (e.g., identity thief vs. virus writer), and they have not included crimes where the computer was used as the "tool," such as cyberbullying.

Three primary objectives were the focus of the current study. First, was to determine whether there were differences in the autistic-like behaviors (poor social skills, poor imagination, poor communication, poor attention-switching, and exceptional attention to detail) exhibited by computer deviants and non-computer deviants. For example, are computer hackers more likely to exhibit autistic-like behaviors when compared to non-computer hackers? Second, was to include other types of computer deviant behavior, such as identity theft, cyberbullying, and virus writing, when assessing autistic-like behaviors. Finally, the third objective was to determine whether autistic-like behaviors distinguished between computer deviants. For instance, are there autistic-like traits that differentiate between individuals who engage in one type of computer deviance (hacking) versus individuals who engage in all computer deviant behaviors (hacking, identity theft, cyberbullying, and virus writing)?

An online survey was completed by 269 university students, which measured the prevalence of computer deviance (i.e., hacking, virus writing, cyberbullying, and identity theft) and autistic-like traits (i.e., poor social skills, poor attention-switching, poor imagination, poor communication, and exceptional attention to detail). 57% ($n = 170$) of students reported engaging in hacking behaviors, 13% ($n = 38$) reported engaging in identity theft, 23% ($n = 66$) reported engaging in cyberbullying, and 8% ($n = 23$) engaged in virus writing. Only two students (.01%) met the threshold for clinical levels of autistic traits according to the Autism Quotient, and both of these individuals engaged in computer deviant behavior.⁶ In contrast to the expectations, the non-hackers actually exhibited more abnormal autistic-like behaviors, specifically a strong attention to detail, compared to the self-reported hackers in the current study. The identity thieves and virus writers exhibited more autistic traits compared to their non-deviant counterparts, specifically poor social skills, poor communication, and poor imagination. On average, cyberbullies reported more autistic traits than non-cyberbullies, specifically poor communication.

Finally, the current study supported the expectation of significant group differences on autistic traits based on the individual's level of computer deviance. Specifically, those individuals who engaged in hacking, identity theft, cyberbullying, and virus writing exhibited more autistic traits, including poor social skills, poor communication, and poor imagination, compared to all other individuals engaging in computer deviant behaviors (1 type, 2 types, and 3 types). However, there were no autistic traits, which discriminated between the other levels of computer deviance (i.e., discriminating 1 type from 2 types). Overall, autistic-like traits were related to identity theft, virus writing, and cyberbullying; however, the overall group mean score for the computer deviants on autistic traits was 20, which is in the intermediate rather than clinically significant (32+) range for Asperger syndrome. Limitations and suggestions for future research are discussed.

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