



### B3 Psychological Assessments and Attitudes Toward Deviant Computer Behaviors

Marc Rogers, PhD\*, 401 North Grant Street, West Lafayette, IN 47907; and Kathryn C. Seigfried-Spellar, MA\*, 401 North Grant Street, Knoy Hall of Technology, West Lafayette, IN 47907

The goals of this presentation are to explore whether deviant computer behavior is part of a larger syndrome of deviance. This presentation will examine whether the personality profiles of those committing deviant computer behaviors are similar to the profiles obtained from those who engage in more general deviance; will examine a potentially unique correlation of deviant computer behavior — Asperger's syndrome; will validate psychometric instruments for use with the "hacker" sub-culture, and to assist digital evidence investigators. This presentation will impact the forensic science community by providing information related to those individuals who are involved in criminal computer behavior.

Surveys indicate that there is an increasing risk of computer intrusion, computer crime and attacks on personal and business information. Computer criminality is a serious problem that affects individuals, businesses, and our nation's security. In 2008, the Computer Security Institute (CSI) released the findings from their Computer Crime and Security Survey. The survey consisted of 521 respondents, who reported an average cost per financial fraud incident of \$500,000<sup>2</sup>. Forty four percent of the respondents also reported that they were victims of insider abuse and twenty-seven percent reported being the victim of targeted attacks<sup>2</sup>. Despite these figures, most work in this area is aimed at devising approaches to protect computer information; very little research has been aimed at understanding why and who commits these criminal acts. The current research adds to this small body of knowledge by examining the motives and characteristics and those involved in deviant computer behavior.

The current study has four specific goals. The first goal is to explore whether deviant computer behavior is part of a larger syndrome of deviance. Much research has shown that non-computer-related delinquent/criminal activities, substance use, and early/risky sexual behavior are typically seen in the same individuals and can be considered part of a larger syndrome of deviance. The first goal of the present project is to ascertain how strongly related deviant computer behavior is to these other markers of deviance. This is achieved by examining the interrelations among measures of delinquency/crime, substance use, early/risky sexual behavior, and deviant computer behavior.

Second, personality profiles are examined to determine whether those committing deviant computer behaviors are similar to the profiles obtained from those who engage in more general deviance. Several meta-analyses have demonstrated that interpersonal antagonism (i.e., lack of empathy, oppositionality, grandiosity, and selfishness) and problems with impulse control are the most consistent personality correlations of a variety of antisocial and deviant behavior. Thus, the second goal of the present study is to compare the personality correlation of deviant computer behavior to what is known about the personality correlations of crime/delinquency, substance use, and early/risky sexual behavior. This goal is achieved by correlating the degree of deviant computer behavior with indicators of five broad-band personality factors derived from basic research on personality and widely-used in studies of deviant behavior. The five factor model employed consists of five broad traits: Neuroticism (vs. emotional stability), Extraversion (vs. introversion), Openness (vs. closedness) to experience, Agreeableness (vs. antagonism), and Conscientiousness/Constraint (vs. lack of constraint).

The third goal is to examine a potentially unique correlation of deviant computer behavior—Asperger's syndrome. Within the past decade, questions are emerging regarding the possibility of there being a link between computer criminality and a disorder known as Asperger syndrome. Unfortunately, this question has not received the attention from empirical and scientific research that it deserves and demands; no research has been conducted on whether or not there is a relationship between hacking and Asperger syndrome<sup>1,6,7</sup>. As computer criminals begin to face our judicial system, the possibility of a link between criminal behavior and this disorder is extremely important, for it could become a legal defense or mitigating factor in a criminal case. In addition, "a diagnosis could alter sentencing . . . [by] assessing the degree of criminal intent!" Due to the lack of research, understanding the true relationship between computer criminals and Asperger syndrome needs to be addressed. Therefore, the goal of the current study

between computer criminality and Asperger syndrome. This comparison will involve examining relations between a self-reported measure of symptoms of Asperger's syndrome and measures of computer-related deviance.

The fourth objective is to further validate certain psychometric instruments for use with the "hacker" sub-culture. These instruments have been developed and/or used in previous studies<sup>3,4,5</sup>.

Results and future implications of the study's findings will be discussed.



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### References:

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### Computer Deviance, Psychological Assessments, Digital Evidence Investigations