Deviant Sexual Thoughts and Behaviors: The Roles of Personality and Pornography Use

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ABSTRACT

Although the nature and prevalence of deviant sexual thoughts and behaviors has been well investigated in forensic samples, far less attention has been paid to these phenomena in sub-clinical settings. A male undergraduate sample (N = 88) completed the Multidimensional Assessment of Sex and Aggression (MASA; Knight et al., 1994) as a measure of deviant sexual thoughts and behaviors, along with various measures of personality. First, we investigated possible personality correlates of deviant sexual thoughts and behaviors. In particular, we examined the roles of the Big Five personality traits (i.e., Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience; John & Srivastava, 1999), as well as the “Dark Triad” of personality (i.e., sub-clinical narcissism, Machiavellianism, and sub-clinical psychopathy; Paulhus & Williams, 2002) in their relationship to deviant sexual thoughts and behaviors. Second, we examined the nature of the previously established relationship between pornography use and deviant sexual behavior (Cooper et al., 2002). Specifically, we tested whether personality (e.g., sub-clinical psychopathy) moderated the relationship between pornography use and deviant sexual behavior. Results indicated that Neuroticism and sub-clinical psychopathy were the two main correlates of deviant sexual thoughts, whereas sub-clinical narcissism and sub-clinical psychopathy correlated with deviant sexual behavior. Furthermore, ANOVA analyses revealed that sub-clinical psychopathy moderated the relationship between pornography use and deviant sexual behavior. That is, pornography use was associated with high levels of deviant sexual behavior only for participants scoring high in sub-clinical psychopathy. Together, these results support Bandura's (1977) "reciprocal determinism" theory, in that it appears that individuals with certain personality characteristics are attracted to certain types of media content, and that these individuals are affected by that content differently than are other people.
INTRODUCTION

The nature and prevalence of deviant sexual thoughts and behaviors has been well-investigated in forensic samples (Langevin et al., 1998; Myers & Blashfield, 1997; Prentky et al., 1989). In contrast, little attention has been paid to these phenomena in sub-clinical settings. This relative lack of research formed the impetus for the present investigation. Research in the area of sexual thoughts and behaviors often uses self-report measures of deviant sexual thoughts and behaviors, such as the Multidimensional Assessment of Sex and Aggression (MASA; Knight et al., 1994). Among the interesting findings that have been generated by the MASA and similar scales is that the prevalence of deviant sexual thoughts and behaviors is surprisingly high in sub-clinical samples (Cooper et al., 2002; Crepault & Couture, 1980; Renaud & Byers, 1999). In some of these studies, the sub-clinical prevalence rates rival those of incarcerated samples (Cooper et al., 2002).

Research exploring associations between individual differences (e.g., personality) and deviant sexual thoughts and behaviors is scarce, especially in sub-clinical populations. Thus, we examined some of these personality correlates in a male undergraduate sample. One potential personality candidate is psychopathy, a personality construct defined by low empathy and guilt, impulsivity, and antisocial tendencies (Cleckley, 1941; Hare, 2003). This construct has a long history in the clinical-forensic literature, where it has been established as one of the most dangerous and socially destructive personality constructs via its consistent association with a wide range of criminal behavior (Hare, 2003). Recently, interest in expanding psychopathy research to include sub-clinical populations has grown dramatically (Babiak & Hare, 2004; Kirkman, 2002). One important distinction is that, because these studies utilise a self-report measure of psychopathy as opposed to the PCL-R, no statements can be made about psychopathy in the clinical-forensic sense. Nonetheless, many of the results reported in sub-clinical samples mirror those of clinical-forensic samples (see Hare, 2003).

Although some studies have reported correlations between psychopathy and sexual deviance in forensic samples (see Hare, 2003 for a review), no research has explored such phenomena in sub-clinical samples. Thus, exploring a possible link between sub-clinical psychopathy and deviant sexual thoughts and behaviors is an important undertaking. Other potential personality candidates include Machiavellianism and sub-clinical
narcissism. Along with sub-clinical psychopathy, these three traits have been labeled the “Dark Triad” of personality (Paulhus & Williams, 2002). Machiavellians are defined by their cynical and manipulative nature, whereas narcissism involves grandiosity, self-absorption, and a sense of entitlement. Finally, no study involving personality would be complete without including the Big Five traits of personality (see John & Srivastava, 1999). These traits – namely Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience – are widely believed to constitute the fundamental factors of personality (Digman, 1990).

A second goal of the study was to examine the role of pornography in deviant sexual thoughts and behaviors. Cooper et al. (2002) reported that hard core pornography use was positively associated with deviant sexual thoughts and behaviors. However, the universal nature of this relationship is unclear. Most researchers would agree that media influences differ according to the viewer's personal characteristics, and recent efforts have been made to identify these characteristics (e.g., see Anderson et al., 2003). Personality traits would likely provide some answers to these questions – and in particular, sub-clinical psychopathy. Given the previously established links between (a) sub-clinical psychopathy and pornography use (Williams et al., 2001) and (b) psychopathy and sexually deviant behavior (for a review, see Hare, 2003), we predicted that sub-clinical psychopathy would moderate the relationship reported by Cooper et al. (2002).

METHOD

Participants. Eighty-eight male undergraduate students (50% East Asian, 27% European, 23% Other) at the University of British Columbia participated in the study for course credit. Participants obtained and returned the confidential self-report questionnaire packages from an anonymous pick-up and drop-off box. Participants were instructed not to put their name, student number, or any other identifying information anywhere on the questionnaire package. Due to the sensitive nature of the questionnaires, this confidentiality requirement was essential to reduce any pressure for socially desirable responding. A standard demographics form was contained in the questionnaire package, which included questions involving past and present pornography use (e.g., type, hours used per week, types of media used, etc.).
Measures. Each of the self-report measures was selected based on its reputable psychometric properties. Unless otherwise stated, the response format of each of the questionnaires utilized a 5-point Likert-type scale (1 = disagree strongly, 5 = agree strongly). The primary dependent measure was the 234-item MASA (Knight et al., 1994), which assessed sexual thoughts and behaviors across various categories (i.e., frotteurism, voyeurism, exhibitionism, transvestism, pedophilia, bondage, sadism, rape, and fetishes). Participants received two scores for each category: (1) thoughts and (2) behaviors, as well as an overall score for deviant thoughts and for deviant behaviors.

The 44-item Big Five Inventory (BFI; John & Srivastava, 1999) was used to assess the Big Five factors of personality. The Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979) is a 40-item forced-choice questionnaire that measures sub-clinical narcissism. Participants are asked to choose from a pair of statements and to identify the one that they agree with the most. Narcissistic responses are given a score of 1, and non-narcissistic responses are given a score of 0. Item scores are then summed, resulting in an overall NPI score ranging between 0 and 40. We used an abbreviated 20-item version of the Mach-IV (Christie & Geis, 1970) to measure Machiavellianism. The 40-item Hare Self-Report Psychopathy Scale-III (SRP-III; Paulhus et al., 2004) was used to measure sub-clinical psychopathy. This scale is a self-report version of the Psychopathy Checklist-Revised (Hare, 2003), considered to be the gold standard of psychopathy assessment in clinical-forensic settings.

RESULTS

Personality correlates of deviant sexual thoughts and behaviors. The alpha reliability estimates for the personality data were generally sound, ranging from .64 (Mach-IV) to .85 (NPI) with most of the values surpassing .70. The alpha reliabilities for the MASA were also strong, with values of .92 and .94 for the overall thoughts and behavior scores, respectively. Table 1 displays the correlations between the personality variables and the various deviant sexual thoughts. Only two personality variables correlated significantly with overall deviant sexual thoughts: Neuroticism ($r = .23, p < .05$) and sub-clinical psychopathy ($r = .23, p < .05$). Further inspection of the MASA subscale correlations suggests that the Neuroticism correlation is explained by
correlations with the Frotteurism and Bondage subscales of the MASA, whereas the psychopathy correlation seems to be influenced by the Bondage and Sadism subscales. Although no other personality variables correlated significantly with overall deviant thoughts, there were other various significant correlations with the MASA subscales, as displayed in Table 1.

Table 2 displays the correlations between the personality variables and deviant sexual behaviors. The only personality variables that correlated significantly with overall deviant sexual behaviours were sub-clinical psychopathy ($r = .26, p < .05$) and sub-clinical narcissism ($r = .24, p < .05$). Interestingly, but not surprisingly, each of these correlations seems to be explained by the more violent subtypes of deviant sexual behaviors – Bondage, Sadism, and Rape.

**Multiple regression analyses.** Because of the overlap among the Dark Triad of personality, each of the three was placed as a predictor in a multiple regression equation with overall deviant sexual thoughts as the outcome variable. Sub-clinical psychopathy produced the largest beta value ($\beta = .19$) compared to narcissism and Machiavellianism (each $\beta = .05$). When this analysis was repeated with overall deviant sexual behaviors as the outcome variable, sub-clinical psychopathy was again the strongest predictor (sub-clinical psychopathy $\beta = .18$, narcissism $\beta = .13$, Machiavellianism $\beta = .05$). However, none of these values reached statistical significance, likely due to the relatively small sample size.

**ANOVA analyses.** We next explored the possibility that sub-clinical psychopathy may moderate the relationship between pornography use and deviant sexual behaviors. We used a median split to categorize participants into low or high sub-clinical psychopathy groups, then conducted a 2 (high sub-clinical psychopathy vs. low sub-clinical psychopathy) x 2 (currently use pornography vs. don’t currently use pornography) fixed-effects ANOVA, with overall deviant sexual behavior as the outcome variable. This analysis revealed a significant interaction ($F[1, 84] = 6.10, p < .05$), which is displayed in Figure 1. This graph dramatically illustrates the moderating effect of sub-clinical psychopathy in the association between pornography use and deviant sexual behavior. Specifically, pornography use was only associated with high
deviant sexual behavior scores on the MASA for individuals scoring high in sub-clinical psychopathy ($M = 13.5$). In contrast, individuals scoring high in sub-clinical psychopathy who did not report pornography use reported significantly lower deviant sexual behavior ($M = 2.1$), as did individuals who scored low in sub-clinical psychopathy who either did ($M = 3.3$) or did not ($M = 3.1$) report pornography use.

**DISCUSSION**

*Personality correlates of deviant sexual thoughts and behaviors.* Our study revealed some interesting links between personality and deviant sexual thoughts and behaviors. Sub-clinical psychopathy was the only personality variable that correlated significantly with both deviant sexual thoughts and behaviors. Along with other research that has established links between sub-clinical psychopathy and general delinquency (e.g., Williams et al., 2001), this finding supports the assertion that psychopathy, whether measured in forensic samples or examined in non-forensic samples with the use of sub-clinical measures, is strongly related to various antisocial behaviors (e.g., deviant sexual behaviors). In other words, these findings reinforce the overall image of psychopathy as perhaps the most malevolent and dangerous personality construct. Correlations between sub-clinical psychopathy and the more violent MASA subscales supports findings in the clinical-forensic literature that psychopathic traits may be differentially associated with specific types of sexual offending (e.g., prevalence rates of psychopathy have been shown to be higher among rapists than child molesters; see Hare, 2003).

Regarding deviant sexual thoughts, the only other significant personality correlate was Neuroticism. The nature of this relationship is likely quite different from the parallel relationship found between sub-clinical psychopathy and sexually deviant thoughts. For neurotic individuals, sexually deviant thoughts may be intrusive and unwanted. In contrast, these thoughts may be appealing and embraced by individuals scoring high in sub-clinical psychopathy. With respect to the correlations with the Bondage subscale of the MASA, for example, neurotic individuals may envision themselves as being the unwanted victims of bondage in these thoughts, whereas sub-clinical psychopaths may see themselves as the individuals in control of the situations.
Furthermore, our correlations suggest that although the deviant sexual thoughts of sub-clinical psychopaths translate into deviant sexual behaviors, the same cannot be said for the deviant sexual thoughts of neurotic individuals. Finally, although narcissism was also a significant correlate of deviant sexual behaviors, multiple regression analyses revealed that this association was not as strong as was the relationship with sub-clinical psychopathy.

The moderating effect of psychopathy. The ANOVA analyses revealed an interesting relationship between sub-clinical psychopathy, pornography use, and deviant sexual behavior. Apparently, the negative impact of pornography on individuals’ sexual behavior is not universal, at least with respect to deviant sexual behaviors as measured by the MASA. Specifically, the convergence of pornography use and sub-clinical psychopathic tendencies appears to be the most dangerous combination. In contrast, sub-clinical psychopaths who do not use pornography do not differ from participants low in sub-clinical psychopathy. Furthermore, there appears to be no effect of pornography use in predicting deviant sexual behavior in participants scoring low in sub-clinical psychopathy. These findings are similar to those of previous research, which suggests that the effects of pornography use are moderated by individual differences (Check & Guloien, 1989; Seto, Maric, & Barbaree, 2001). For example, Check and Guloien (1989) reported that pornography use predicted rape activity only for those scoring high in Eysenck’s Psychoticism (a construct that has been suggested to be similar, but not identical, to sub-clinical psychopathy; Digman, 1990). It appears that, rather than serving a cathartic function, pornography may activate or escalate the deviant sexual behavior of sub-clinical psychopaths.

This interaction also builds upon an interesting trend regarding the moderating effects of sub-clinical psychopathy in predicting antisocial behavior from media exposure. For example, Williams et al. (2001) reported that exposure to violent sports predicted delinquency only for those scoring high in sub-clinical psychopathy. Thus, it appears that the moderating effects of sub-clinical psychopathy may generalize to other types of media consumption. Taken together, these results support Bandura's (1977) "reciprocal determinism" theory, which states that individuals with certain personality characteristics are attracted to certain types of media content, and that these individuals are affected by that content differently than are other people. That is, it appears that pornography is particularly appealing to sub-clinical psychopaths (Williams et al., 2001), and that
pornography influences deviant sexual behavior in sub-clinical psychopaths only. Of course, it should be noted that the deviant sexual behaviors measured by the MASA represent only one possible negative impact of viewing pornography.

Possible limitations. Although these results are intriguing, there are a few limitations involved in this study. First, due to the wording of some MASA items (e.g., references to male genitalia), we were forced to use an exclusively male sample. Thus, the generalizability of the results across genders is unclear. However, it is likely that these items could be re-worded so that a ‘female’ version of the MASA could be developed. Similarly, the ethnic composition of our sample was somewhat unique. Our sample included a higher proportion of East Asians than most other undergraduate samples, and fewer individuals of other ethnic backgrounds (e.g., African American, Latin American, etc.). This unique ethnic breakdown is characteristic of samples attained at the University of British Columbia. A larger sample size is necessary before ethnic differences can be tested with confidence. These results could be further elaborated through the use of objective indicators of sexual deviance, such as criminal records. It will also be important to further clarify the nature of the pornography being viewed by the participants, such as the degree of violence included. We are currently addressing some of these limitations with more detailed analyses of these data.

Second, due to the timing of the data collection in this study, causality cannot be inferred from any of the analyses – the results are strictly correlational in nature. Regarding the correlations between personality and deviant sexual thoughts and behaviors, it is equally plausible that personality causes sexually deviant thoughts and behavior, or vice versa. Consider the previous example involving Neuroticism and deviant sexual thoughts: this correlation could be due to pre-existing intrusive and unwanted deviant sexual thoughts causing an increase in anxiety levels (i.e., the development of a neurotic personality). Conversely, pre-existing neuroses could influence common sexual thoughts through rumination or punishment salience. With respect to psychopathy, pre-existing genetically-influenced psychopathic tendencies (e.g., impulsivity, antisociality, low empathy and guilt) could cause an individual to experience more deviant sexual thoughts and behaviors. On the other hand, deviant sexual thoughts may eventually de-sensitize certain individuals to their content, thus contributing to the development of a psychopathic personality.
Similarly, regarding the ANOVA results, causality cannot be inferred for the relationship between pornography use and sexually deviant behavior. Rather than stating that using pornography causes an individual to engage in deviant sexual behaviors, it may be that individuals use pornography to re-experience their previous deviant sexual exploits. Follow-up studies (e.g., involving longitudinal designs) would shed light on the causal nature of these relationships.

In sum, our study revealed two main findings. First, sub-clinical psychopathy is the strongest and most consistent personality correlate of deviant sexual thoughts and behaviors in an undergraduate male sample. Second, sub-clinical psychopathy moderates the relationship between pornography use and deviant sexual behavior. Specifically, pornography use is associated with deviant sexual behavior only for those scoring high in sub-clinical psychopathy.
REFERENCES


Table 1. Personality correlates of the Multidimensional Assessment of Sex and Aggression - Thought subscales.

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Note: N = 88. * = sig. at p < .05, ** = sig. at p < .01.

Scales: MASA = Multidimensional Assessment of Sex and Aggression; Big Five = Big Five Inventory; Narcissism = Narcissistic Personality Inventory; Machiavellianism = Mach-IV; Psychopathy = Hare Self-Report Psychopathy Scale-III.
Table 2. Personality correlates of the Multidimensional Assessment of Sex and Aggression - Behavior subscales.

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Scales: MASA = Multidimensional Assessment of Sex and Aggression; Big Five = Big Five Inventory; Narcissism = Narcissistic Personality Inventory; Machiavellianism = Mach-IV; Psychopathy = Hare Self-Report Psychopathy Scale-III.
Fig. 1
Interaction Between Subclinical Psychopathy and Pornography Use in Predicting Deviant Sexual Behavior

Note: N = 88. \( F(1, 84) = 6.10, p < .05. \)
Deviant sexual behavior is measured by MASA overall behavior score, psychopathy measured by Hare SRP-III.