# University of Windsor Scholarship at UWindsor

**Electronic Theses and Dissertations** 

Theses, Dissertations, and Major Papers

Winter 2014

## Effect of Deviant Sexual Fantasies on Aberrant Sexual Behaviours

Fiona Dyshniku University of Windsor

Follow this and additional works at: https://scholar.uwindsor.ca/etd

### Recommended Citation

Dyshniku, Fiona, "Effect of Deviant Sexual Fantasies on Aberrant Sexual Behaviours" (2014). *Electronic Theses and Dissertations*. 5024. https://scholar.uwindsor.ca/etd/5024

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.

### By

Fiona Dyshniku, B.A. (Hons)

A Thesis
Submitted to the Faculty of Graduate Studies
Through the Department of Psychology
In Partial Fulfillment of the Requirements for the
Degree of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada

2013

© 2013 Fiona Dyshniku

### Effect of Deviant Sexual Fantasies on Aberrant Sexual Behaviours

Ву	
Fiona Dyshniku	
APPROVED BY:	
J. Grant School of Social Work	
D. Jackson Department of Psychology	
S. Hibbard, Advisor Department of Psychology	

#### DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

### **ABSTRACT**

Despite suggestions that deviant sexual fantasies play a role in aberrant sexual activity (e.g. Prentky et al., 1989), the nuanced nature of the fantasy-behaviour relationship is poorly understood and inconsistent (Williams, Cooper, Howell, Yuille, & Paulhus, 2008). The current study sought to clarify the fantasy-behaviour relationship by investigating the extent to which fantasies interact with high levels of impulsivity, psychopathy-narcissism, anger, and offense-supportive cognitions in explaining deviant sexual behaviour. Two hundred and fifty male and 152 female undergraduates filled out a battery of explicit and implicit measures. Results of the moderation analysis revealed some support for the main hypotheses. The study contributes to the knowledge base on deviant sexuality by proposing and testing a causal model, which could in turn be extrapolated to sexual offending. Clinical implications include gains in avenues for prevention and treatment.

### TABLE OF CONTENTS

DECLARATION OF ORIGINALITY	iii
ABSTRACT	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	ix
INTRODUCTION	1
What Are Deviant Sexual Fantasies?	1
The Etiology and Maintenance of DSF	5
The Role of DSF in Sexual Behaviour	8
Theoretical Bases of a Fantasy-Behaviour Relationship	14
Under What Conditions Do Fantasies Predict Sexual Offending?	17
Refining the Current Literature	31
Extending the Current Literature	37
CURRENT STUDY	42
Objective of Current Study	42
Operationalization Concerns	43
Hypotheses	46
METHOD	47
Participants	47
Procedure	63

RESULTS	67
Data Analysis	68
Reformulating the Variables	70
Main Analysis: Regression	77
Summary of Findings	83
DISCUSSION	84
REFERENCES	96
APPENDICES	139
Appendix A	
Appendix B	
Appendix C	
Appendix D	
Appendix E	
Appendix F	
Appendix G	201
Appendix H	
VITA AUCTORIS	207

### LIST OF TABLES

Table 1. Frequency of Deviant Sexual Fantasies and Deviant Sexual Acts in Non-Offendon	er
Samples	. 112
Table 2. Summary of Variables and Measures Used in the Current Study	. 114
Table 3. Demographic Information for Male and Female Participants	. 115
Table 4. Summary of Pearson r Intercorrelations Among the Explicit Measures	. 117
Table 5. Pattern Matrix for the Four-Component Solution with a Promax Rotation	. 118
Table 6. Structure Matrix for the Four-Component Solution with a Promax Rotation	. 119
Table 7. Component Correlation Matrix	. 120
Table 8. Summary of Pearson r Intercorrelations Among the Implicit Measures	. 121
Table 9. Pattern Matrix for the Four-Component Solution with a Promax Rotation	. 122
Table 10. Structure Matrix for the Four-Component Solution with a Promax Rotation	. 123
Table 11. Component Correlation Matrix	. 124
Table 12. Descriptive Statistics for 175 Male Participants	. 125
Table 13. Moderated Multiple Regression Model for the MASA – Behaviour Index	. 126
Table 14. Moderated Multiple Regression Model for Rape Proclivity	. 128
Table 15. Moderated Multiple Regression Model for Interest in Child Molestation Proclin	vity
	. 130

### LIST OF FIGURES

Figure 1. Regression of MASA – Behaviour Index on the MASA – Fantasy Index at Three
Levels of Anger
Figure 2. Regression of MASA – Behaviour Index on Positive Evaluation Rape at Three
Levels of Anger
Figure 3. Regression of MASA – Behaviour Index on Interest in Pedophilia at Three Levels
of Anger
Figure 4. Regression of Rape Proclivity on Interest in Pedophilia at Three Levels of
Impulsivity
Figure 5. Regression of Child Molestation Proclivity on MASA – Fantasy Index at Three
Levels of Surgent Narcissism
Figure 6. Regression of Child Molestation Proclivity on Interest in Sadomasochism at Three
Levels of Impulsivity. 13
Figure 7. Regression of Child Molestation Proclivity on Interest in Pedophilia at Three
Levels of Offense-Supportive Cognitions

### LIST OF ABBREVIATIONS

BIDR The Balanced Inventory of Desirable Responding – Version 6 –

Impression Management Scale

BIS Barratt Impulsiveness Scale

CSA-IAT Child-Sex IAT

DSF Deviant Sexual Fantasies

I<sub>7</sub> Eysenck's Impulsiveness Questionnaire

I<sub>7</sub> Imp Eysenck's Impulsiveness Questionnaire – Impulsivity subscale

I<sub>7</sub> Vent Eysenck's Impulsiveness Questionnaire – Venturesomeness

subscale

ICMS Interest in Child Molestation Scale

MAI Multidimensional Anger Inventory

MASA Multidimensional Assessment of Sex and Aggression

MOLEST scale MOLEST scale

NPI-16 Narcissistic Personality Inventory – 16 items

RAPE scale RAPE scale

RE-IAT Rape Evaluation IAT

RP Rape Proclivity Scale

SCS Sexual Compulsivity Scale

SFQ Sexual Fantasy Questionnaire

SRP-SF Self-Report Psychopathy – Short Form

VT Sadomasochism Viewing Time Task – Sexual Interest in Sadomasochism

VT Pedophilia Viewing Time Task – Sexual Interest in Pedophilia

#### INTRODUCTION

### What Are Deviant Sexual Fantasies?

Despite some recent efforts to systematically define deviant sexual fantasies (DSF), the task has proven rather elusive. Over the years, researchers have opted for formulations that range in scope from the broader construct of "sexual fantasies" (e.g., Carlstedt, Bood, & Norlander, 2011; Plaud & Bigwood, 1997; Renaud & Byers, 1999; Sheldon & Howitt, 2008; Zurbriggen & Yost, 2004), to the more narrowly defined "violent fantasies" (Gellerman & Suddath, 2005), "offense-focused fantasies" (Gee, Devilly, & Ward, 2004), or "crime fantasies" (Prentky et al., 1989). Some simply use the phrase deviant sexual fantasies (Maniglio, 2011; Williams, Cooper, Howell, Yuille, & Paulhus, 2008). Although a sexual fantasy need not be deviant in order to be sexually arousing, conceptualizing DSF exclusively in terms of arousal does not quite capture the construct. Rather, as the more narrow definitions have recognized, deviant sexual fantasizing involves more than sexual arousal; this arousal has to be linked to imagined paraphilic acts. To illustrate, Prentky and colleagues (1989) identified crime fantasies as involving the "intentional infliction of harm in a sadistic or sexually violent way" (p. 889), whereas Gee and his colleagues (2004) linked offense-focused fantasies to sexually deviant content that, "if acted out, would legally constitute a sexual offense" (p. 323).

Given the multitude of DSF definitions in the existing literature, it is important to draw attention to some commonalities in order to elucidate the factor(s) underlying most of them. In their review of DSF formulations, Bartels and Gannon (2011) identified the following core elements: (a) the content of the fantasy is sexually arousing, (b) these fantasies would seem to occur internally or within the mind (i.e., mental images or cognitions), and (c) the nature of the fantasies is elaborate or story-like. In the narrower definitions of DSF, a fourth element emerges,

deviance. Naturally then, the discussion moves on to what exactly constitutes deviance.

**Defining deviance.** The next section covers some of the problems encountered in defining the concept of deviance within the context of DSF.

A DSM approach. Borrowing from the Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000)), Akerman and Beech (2011) proposed that deviance be regarded as sexual interest in those sexual practices traditionally recognized as paraphilic, such as exhibitionism (enjoyment or arousal from exposure of genitals), fetishism (enjoyment or arousal from use of nonliving objects), frotteurism (enjoyment or arousal from touching and rubbing against a non-consenting person), pedophilia (enjoyment or arousal from sexual activity with a prepubescent children, 13 or younger), masochism (enjoyment or arousal from receiving humiliation or suffering), sadism (enjoyment or arousal from inflicting humiliation or suffering), transvestic fetishism (enjoyment or arousal from cross-dressing), and voyeurism (enjoyment or arousal from observing sexual activity). As to the more general question of what exactly constitutes a paraphilia, the DSM-IV-TR defines it as "recurrent, intense sexually arousing fantasies, sexual urges or behaviours generally involving 1) nonhuman objects, 2) the suffering or humiliation of oneself or one's partner or 3) children or other non-consenting persons that occur over a period of at least 6 months (Criterion A)...[which] cause clinically significant distress or impairment in social, occupational or other important areas of functioning (Criterion B)". Although this DSM-inspired definition of deviance seems fitting with the current body of literature, at least to the extent that Criterion A is concerned, the concept needs further specification. There are several caveats to relying on the

<sup>&</sup>lt;sup>1</sup> Criterion B for pedophilia, voyeurism, exhibitionism, frotteurism, and sexual sadism requires that the person must have "acted on these urges or the urge or sexual fantasies cause marked distress or interpersonal difficulty" (APA, 2000, p. 566).

DSM for defining paraphilias. Although this is not the place to explicate some of the criticisms aimed at the DSM, suffice to say that the manual a) espouses a medical model as opposed to a biopsychosocial perspective, b) it reflects, to a large extent, compromises between public opinion and other interest groups, which are not always in agreement with the scientific community, and c) compromises among scientists, who often do not agree with each other.

A statistical approach. Can deviance be construed as a statistical rarity? Of course, the terms deviant and normal have a statistically based meaning. As well, prevalence rates in community and college samples suggest that fantasies once thought infrequent are now widely endorsed, a conclusion reached by many including Ahlers et al. (2011), Bartels and Gannon (2011) and Gee et al. (2004). Even so, while some fantasies such as bondage and sadism may be common in non-offenders, others such as fetishism, zoophilia, necrophilia, or autoerotic asphyxia are still highly unusual (Hanson & Morton-Bourgon, 2005). Thus, although statistical frequency alone is related to the concept of deviance, mere frequency does not seem to quite get at what is intended by DSF.

A legal approach. Should deviance be equated to illegal acts (e.g., Gee et al., 2004; Prentky et al., 1989)? On some occasions. Certainly, DSF contain themes that, if acted out, would constitute a sexual offense (i.e., sadistic fantasies would be illegal if acted on with a non-consenting partner). Yet, fetish-themed fantasies are also encompassed within DSF but do not necessarily constitute a sexual offense if acted on.

A social approach. Are we then suggesting that deviance is something morally and socially reprehensible? Perhaps. The high prevalence rates and large commercial markets selling paraphilic pornography and paraphernalia (APA, 2000) imply a growing tolerance of some deviant fantasies and acts, such as consensual bondage domination submission and masochism

(BDSM) play, but not of others, such as pedophilia. Clearly, some paraphilias are illegal and bring social censure, whereas others, not so much.

**Defining DSF for the current study.** In contemplating these different formulations of *deviance* in the context of DSF, it is evident that the concept lacks clear, sharp boundaries. Rather, *deviance* is more realistically modeled as a *fuzzy concept*, meaning that category membership is a matter of degree as opposed to absolute conditions (Belohlavek, Klir, Lewis, & Way, 2009). One way to deal with the *fuzziness* and specify the concept further is to adopt the use of multiple exemplars – exemplary representatives of a category. The DSM-defined paraphilias are exemplars because they exhibit certain features—non-human object, child as object, inflicting/ receiving pain or degradation—that, although they are neither identical nor necessarily co-occurring, are nonetheless highly salient or highly distinctive for membership in the category of paraphilias.

Defining *deviance* in terms of its paraphilic quality, and defining paraphilias in terms of exemplars, is a type of ostensive definition. The paraphilias are listed in the DSM IV-TR, the writer points to them, thus referencing their highly salient characteristics, and this is what is meant by deviance. This is as much specificity as can be reasonably provided at this time.

Based on the preceding discussion on deviance and commonalities across DSF definitions, the current study identifies DSF as any sexually arousing mental imagery of a paraphilic nature involving an elaborate sexual scenario or script. In this definition, paraphilias refer to DSM-defined exhibitionism, fetishism, frotteurism, pedophilia, masochism, sadism, transvestic fetishism, and voyeurism. Within the context of the present investigation, aberrant sexual behaviours are also DSM-defined and refer to behaviours generally involving (a) nonhuman objects, (b) the suffering or humiliation of oneself or one's partner, or (b) children or

other non-consenting persons.

Rape is not defined as a paraphilia in the DSM-IV-TR. Even though a single act of rape would not be counted as a paraphilia, serial rape has many paraphilic characteristics (Abel & Rouleau, 1990). For the purposes of this study, it was assumed that repeated or serial rapists were paraphiliacs. As such, rape fantasies and rape behaviours were investigated alongside the eight other major DSM-defined paraphilias.

DSF, sexual arousal, and sexual interest. In further specifying DSF, it is essential to differentiate fantasies from sexual arousal and sexual interest. Based on their considerable overlap, the constructs of sexual interest, arousal, and fantasies have been used interchangeably in the literature. There are, however, some slight distinctions between them. Specifically, whereas sexual arousal refers to a physiological response that prepares the body for sexual activity (Bartels & Gannon, 2011), sexual interest is a psychological response involving a wanting, a craving, or an attraction to a sexual act (Akerman & Beech, 2011; Bartels & Gannon, 2011). Sexual fantasies are crucial to developing and maintaining interest and they typically precede arousal (Akerman & Beech, 2011), but may also be used to enhance an initial level of arousal (Gee, Ward, & Eccleston, 2003). Having thus far discussed the definition of DSF, the next section focuses on the origins of deviant fantasies.

### The Etiology and Maintenance of DSF

In investigating the source of DSF, two complementing theories have emerged: One focuses on the origins of fantasies as arising from direct or vicarious experiences, whereas the other touches on acquisition, but primarily focuses on mechanisms of maintenance and development.

**DSF** and direct or vicarious experiences. Consistent with the first line of research,

Marshall and Marshall (2000) proposed a model whereby poor parental attachment renders a child more vulnerable to being sexually abused. The abuse is thought to lead to early sexualization, which teaches the individual to turn to sex, including deviant fantasizing, as a coping strategy. A similar argument for the importance of early traumatic experiences, including childhood sexual abuse, was made by Maniglio (2011). He contended that such experiences could result in psychological problems, which, in the absence of more effective coping techniques, could lead to the use of DSF in order to temporarily cope with painful abuse-related mental states.

A common theme between both these proposals is a social learning component whereby the child learns to use DSF to manage early sexual victimization or a comparable traumatic experience. Research has supported such contentions with findings that DSF emerges out of sexual abuse perpetrated by an adult (Howitt, 2004; Sheldon & Howitt, 2008).

Sexual abuse and early traumatic experience are not the only caretaker-related predisposers to DSF. Vicarious learning, such as exposure to sexual violence or pornography at a young age, has also been shown to play a part in the development of DSF. For example, in their exploration of developmental factors in a sample of adult rapists, Beauregard, Lussier, and Proulx (2004), found that use of pornography during childhood and adolescence, as well as a sexually inappropriate family environment—which they defined as witnessing incestuous behaviour within the family or witnessing promiscuous sex within the family—were linked to the development of deviant sexual preferences in adulthood. Furthermore, since exposure to sexually violent pornographic content during teen years coincides with the onset of puberty, it is only logical that deviant and non-deviant sexual fantasies are regularly experienced among a majority of adolescents. In particular, adolescent who later sexually offend are reported to endorse a high

frequency of DSF in their teen years. Of the 561 male offenders evaluated by Abel and Rouleau (1990), 53.6% reported the onset of deviant sexual interest prior to the age of 18. Similarly, DSM-IV-TR specifies the adolescent and sometimes childhood onset of paraphilic fantasies, with behaviours typically evident in early adulthood.

In addition to vicarious learning, some have hypothesized that early sexualization, independent of sexual abuse, may fuel deviant fantasizing. Although research into this aspect of sexualization is quite limited, preliminary findings indicate that some experiences, more so than others, may be linked to DSF. Specifically, there is some evidence that sexual activity or sexual exploration with a childhood peer (when under the age of 12 years) is related to the emergence of fantasies in pedophilic offenders (Sheldon & Howitt, 2008). On the other hand, when Beauregard and colleagues (2004) investigated the age of onset of sexual behaviour, including age at first masturbation, age at first heterosexual contact, and age at first heterosexual intercourse, the variable was not significantly associated with the development of deviant sexual preferences.

DSF and conditioning experiences. The second line of research is predominantly associated with a conditioning model, which posits that a possibly accidental deviant sexual experience (e.g., viewing a movie with strong elements of sex and violence) initially associated with some sexual arousal (classical conditioning) acquires even greater arousal properties if later imagined during masturbation or other sexually arousing activities that lead to orgasm (operant conditioning). At the operant conditioning stage, deviant interest is maintained by continued masturbation to sexual fantasies and intermittent deviant sexual experience that reinforce the fantasy-masturbation relationship (Laws & Marshall, 1990). Furthering the argument for a conditioning process in maintaining DSF are those researchers who theorize that fantasies go through minor changes in order to prevent habituation and retain their sexually arousing content.

With subsequent changes, even fantasies that are not initially deviant become increasingly so (Gee et al., 2004; Meloy, 2000).

Support for a conditioning approach to the development and maintenance of DSF is mixed. There has been some limited success in treating sex offenders<sup>2</sup> with cognitive behavioural therapies (CBT), which incorporate behavioural techniques that modify the hypothesized conditioned relationship between DSF and masturbation (Laws & O'Donohue, 2008). Although these studies indirectly lend support to the conditioning theory, the effectiveness of DSF-reduction techniques has not been demonstrated in isolation from other CBT components (Howitt, 2004). As a result, direct support for the conditioning theory is still lacking.

**Conclusion.** Taken together, the trend of the theoretical and empirical work reviewed suggests that there is some support for the role of sexual victimization and vicarious learning in the origins of DSF. On the other hand, although the conditioning theory may make intuitive sense in explaining the acquisition and maintenance of DSF, research has yet to directly validate the conditioned relationship at the core of the model.

#### The Role of DSF in Sexual Behaviour

Extensive research in community and undergraduate samples has demonstrated that sexual fantasies, DSF included (e.g., BDSM fantasies), stimulate or enhance sexual arousal. Indeed, frequency of sexual fantasies has been linked to a number of healthy sexual indicators including frequency of orgasm, ability to become sexually aroused, and sexual satisfaction (Leitenberg & Henning, 1995; Wilson & Lang, 1981). Studies have amply demonstrated that

<sup>&</sup>lt;sup>2</sup>The author acknowledges that using terms like "offender" and "sex offender" is a form of labeling that inherently dismisses the other aspects of these individuals' lives. Such labels fail to convey that having sexually offended is only one part of the puzzle, and that the offense does not define these individuals. Despite these drawbacks, the words "offender" and "sex offender" are used throughout the manuscript only so as to be consistent with extant literature.

sexual fantasies during intercourse or outside of intercourse are highly prevalent in both males and females (Leitenberg & Henning, 1995). In non-offender samples, factor analytic studies have identified four sexual fantasy content areas: a) exploratory, b) intimate, c) impersonal, and d) sadomasochistic. Two of the content areas are in the realm of DSF: (a) impersonal fantasies (e.g., watching others engaged in intimate behaviour, fetishism, etc.); and (b) sadomasochistic fantasies (e.g., whipping or spanking, being forced to have sex) (Wilson & Lang, 1981).

Similar to non-offenders, sex offenders also engage in deviant and non-deviant fantasies to stimulate arousal during masturbation or consensual sexual activity (Gee et al., 2003).

Notwithstanding this comparable use of DSF, researchers and clinicians have conventionally regarded deviant fantasies as etiologically important to sexual offending in forensic samples. In contrast to the benign view of fantasies in non-offenders, forensic-based research has attributed ominous qualities to the presence of DSF in offenders, suggesting that it is a blueprint for future aberrant sexual behaviour. Is this contention justified? The next section will provide a more detailed look at the empirical evidence for the role of DSF in sexual offending.

The fantasy-behaviour link in forensic samples. Early excitement for the role of DSF in sexual offending owes much to the influential early work of FBI profilers studying violent sex offenders and their fantasies. Research by Prentky and his colleagues (1989) compared 25 serial sexual murderers and 17 one-time offenders on crime scene information and file review. They found that violent fantasies were present in 86% of the serial sexual murderers (compared to 23% of one-time offenders), a finding that corresponds to a large effect size (r = .578) based on Cohen's guidelines (1992). As such, the researchers concluded that fantasies must play a significant role in motivating and/or planning aberrant sexual behaviour. Other relevant research was conducted by Warren, Hazelwood, and Dietz, (1996), who reported that 80% of sexually

sadistic serial murderers showed evidence of violent sexual fantasies.

More recent forensic-based research suggests that DSF are present in different typologies of sex offenders (i.e., exhibitionists, child molesters, etc.), not just the more violent types. For example, Looman (1995) reported that 52% (r = 0.043) of the child molesters in his study reported fantasizing about children under 12. Although deviant fantasies are clearly found among many types of sex offenders, only the more violent offenders show the highest prevalence of DSF. In further support of this argument, a meta-analytic study of sex offenders identified deviant sexual preferences—which are closely related to DSF (i.e., Akerman & Beech, 2011)—as one of two major predictors of sexual recidivism in adult and adolescent sex offenders. (Hanson & Morton-Bourgon, 2005). In a similar vein, Hanson and Harris (2000) reported that indices of sexual deviance—such as number of paraphilias, lifestyle congruent with deviance, excessive masturbation, self-reported DSF and urges—differentiated between sex offender recidivists and non-recidivists in their study.

*DSF precede sexual offending.* Inspired by the high prevalence of DSF in sex offenders, other researchers went on to propose an etiological role for deviant fantasies in aberrant sexual behaviours. Consistent with this line of work, Dandescu and Wolfe (2003) examined the self-reported use of DSF prior and/or after the commission of a sexual offense in a sample of 57 child molesters and 25 exhibitionist offenders. They found that 64.9% of the child molesters and 76% of the exhibitionists used deviant fantasies prior to the commission of their first sexual offense. Given these high prevalence rates, the authors concluded that DSF might be implicated in the etiology and maintenance of sexual offending.

The idea that DSF precede an offense also emerged from interviews that Gee and colleagues (2003) conducted on 24 male sex offenders. Guided by a grounded theory approach,

they asked participants to provide a detailed retrospective account of their thoughts, fantasies, and behaviours prior to and after their offense. The resulting model, the Sexual Fantasy Function Model (SFFM), highlighted four crucial functions of fantasy in the offense process. Importantly, they argue that, in addition to fantasies regulating affect, producing sexual arousal, and acting as a coping mechanism, they can also be a mental "sketch-pad" in permitting an offender to plan an offense that may be carried out in the future.

Fantasies are sometimes weak predictors of behaviour. A few researchers question the large correlation between deviant fantasy and deviant behaviours, a relation that is based on the high prevalence of DSF in forensic samples. Their doubts are based on findings that the presence of DSF does not always predict sexual acting out. One set of opponents, Sheldon and Howitt (2008), interviewed 16 Internet-only offenders, 25 contact offenders with no history of Internet offending, and 10 offenders with mixed contact and Internet offending history. The authors found that contact offenders reported fewer sexual fantasies of female children than Internet offenders. One possible explanation offered by Sheldon and Howitt was that contact offenders struggled in generating their own fantasies, so they resorted to sexual offending as a way of enriching their fantasy world. They opined that Internet-only offenders may be better at producing their own fantasies and therefore do not need to commit a sex offense. Although DSF can also develop after an offense (e.g., Dandescu & Wolfe, 2003), it is unclear whether the initial motivation to engage in a sex crime is tied to a deficient fantasy life. If true, then deviant fantasies can be recast as almost protecting against, or at least limiting, offending behaviour.

A decade earlier, Langevin and colleagues, (1998) proposed a similar protective role for DSF. The researchers speculated that fantasies might serve as wish fulfillment or function to alleviate sexual frustration in the absence of a desired or unavailable partner. They argued that

the release of sexual tension through fantasies ought to protect the individual from engaging in sexual offending rather than motivate them to sexually act out.

Conclusion. Evidence from forensic samples indicates that (a) there is a correlation between deviant fantasizing and deviant sexual behaviours, and (b) that this correlation is larger among the more dangerous offenders. In other words, DSF may be a better predictor of behaviour when dealing with predatory/organized/serial/dangerous sex offenders, as opposed to disorganized/opportunistic offenders.

The fantasy-behaviour link in non-forensic samples. Reports of a high prevalence of DSF in forensic samples also sparked an interest in testing the fantasy-behaviour relationship in non-offenders. The crucial question was whether the presence of DSF could identify individuals who had committed aberrant sexual acts in the past.

To this end, Greendlinger and Byrne (1987) investigated the fantasy-behaviour relationship in a male undergraduate sample (N = 114) and found that past coercive sexual behaviour was related to coercive sexual fantasies of rape, dominance, and force (r = .26, small-to-medium effect size). More recently, Williams and colleagues (2008) looked at a number of paraphilic fantasies and corresponding behaviours in an undergraduate male sample (Study 1 N = 103, Study 2 N = 88) and, depending on the paraphilia, reported effect sizes ranging from medium to large. To illustrate, the researchers found that fantasies of sexual assault were related to sexual assault behaviours (r = .34 in Study I; r = .38 in Study II; medium effect size). Overall, Williams and his colleagues (2008) pointed out that although 95% of male undergraduates endorsed fantasizing deviantly, only a subset of fantasizer, roughly 38%, acted on their specific fantasies. It is clear from these numbers that many more individuals experience deviant fantasies than act on them. Consequently, deviant fantasies by themselves are neither sufficient nor

necessary to identify individuals who have committed a sexual offense (Gellerman & Suddath, 2005; Leitenberg & Henning, 1995). See Table 1 for more detailed frequency rates of fantasies and behaviours in non-forensic samples.

Conclusion. Although the results from these three non-forensic studies suggest that DSF could statistically predict the commission of aberrant sexual acts, the correlation is not as large as that found among forensic samples. The implication here is that DSF are an unreliable or rather, inconsistent predictor of sexual offending across non-forensic samples. Yet, there is compelling empirical evidence from the forensic literature that: (a) DSF tend to precede deviant sexual offending, (b) DSF is implicated in sexual offending, as demonstrated by the fantasy-behaviour association in sex offenders; and (c) deviant sexual preferences are one of the strongest predictors of sexual recidivism (Hanson & Morton-Bourgon, 2005). It is therefore plausible that DSF are important for understanding sexual offending, but they may not have the same influence on aberrant sexual behaviours across different settings and/or samples.

Statement of the problem. What determines whether deviant fantasies influence aberrant sexual behaviours? According to the seminal 1986 paper by Baron and Kenny (1986), an inconsistent predictor-outcome relationship may signal the presence of moderating variables, which can act as either additive main effects or interact with the predictor. The fantasy-behaviour link may in fact be moderated by certain variables in the presence of which, the link between these two constructs is stronger.

Further, moderation is a better fit with the pattern of how researchers have dealt with DSF and sexual offending thus far. Lastly, the study that is arguably closest to the current investigation (i.e., Williams et al., 2008) also employs a moderation analysis to isolate a subset of non-offenders in whom the fantasy-behaviour link holds.

On the basis of these arguments, it seems reasonable to hypothesize a moderated relationship between DSF and deviant sexual behaviours, but additive main effects cannot be ruled out on the basis of prior research until the analysis is conducted. Similarly, mediation cannot be excluded as a possibility until the patterns of the collected data have been analyzed. To this end, Kraemer and colleagues (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001) recommend several criteria for evaluating how variables work together, including (a) correlation (the extent to which moderator and predictor are correlated), and (b) dominance (the extent to which the interaction between the moderator and the predictor explain more variance in the outcome than the predictor alone or the moderator alone would). Both criteria are important in further understanding the nuanced relationship between deviant fantasies and deviant behaviours.

The next section will briefly review two models of sexual offending with a view to finding variables that may moderate the fantasy-behaviour relationship.

### Theoretical Bases of a Fantasy-Behaviour Relationship

The discussion thus far has centered on the emergence and development of DSF themselves. We have also seen that while serious offending implicates DSF, DSF does not by any means result in offending and/or aberrant sexual behaviours. This next section will be dedicated to exploring the connection(s) between deviant fantasies and offending/deviant sexual behaviours through examining possible moderators. One way to inform the search for moderators is to look at models of the DSF-offending (or behaviour) relationship.

The role of fantasy, along with several other risk factors, is implicated in many theories of sexual offending. Two prominent models will be briefly reviewed here: The Integrated Theory of Sexual Offending (ITSO; Ward & Beech, 2008), and Marshall and Barbaree's Integrated Theory (IR: Marshall & Barbaree, 1990).

The ITSO model. The ITSO is a broad etiological approach to understanding sexual offending. The model draws from a number of causal factors that have thus far been linked to the onset and maintenance of offending, including biological factors (evolution, genetic variation, and neurobiology), ecological variables (social and cultural environment, personal circumstances, physical environment), and core neuropsychological systems. The authors propose that brain development (influenced by genetics and evolution) and social learning interact to determine a person's psychological system. This psychological system is defined by three interlocking neuropsychological systems: motivation/emotion, perception and memory, and action selection and control. Problems in any one or all three of these systems result in four risk factors (also called clinical phenomena): emotional/behavioural regulation problems, need for intimacy/control, offense-supportive cognitions, and deviant arousal. The expression of any one of these or an interaction among them will likely facilitate the commission of a sexual offense, depending on the availability and accessibility of the victim.

Of interest to this review, Ward and Beech hypothesize that DSF precede deviant arousal, which, in turn, is one of the risk factors in their model. Moreover, they argue that failure to effectively cope with intimacy needs and mood problems (linked to the motivational/emotional system) interacts with implicit theories or cognitions (linked to the perception and memory system) to produce DSF and sexual preoccupation. This, accompanied by an inability to adequately control sexual desire, may result in sexual offense. Therefore, within the ITSO framework, DSF are seen as part of a chain of risk factors that interact to increase the likelihood of a sexual offense occurring.

The IR model. Marshall and Barbaree's Integrated Theory posits that traumatic experiences in childhood (e.g., sexual abuse, inconsistent and harsh discipline, etc.) distort

relationship scripts and result in poor social skills, maladaptive self-regulation strategies, and antisocial tendencies. Given that hormones related to sex and aggression originate in the same neural structures in the brain (i.e., the hypothalamus, among others), Marshall and Barbaree further argue that the release of sex hormones during adolescence fuses sex and aggression, which tends to consolidate sexually abusive tendencies. This idea is close to evolutionary theories of psychological events, but, to the author's knowledge, there are no evolutionary theories aimed at explaining specifically deviant or paraphilic acts.

During the adult years, the individual is likely to engage in a string of unsuccessful relationships that are reflective of his distorted relationship scripts and any violent or sexually abusive tendencies he may have developed. As a result of his relationship failures, he may feel rejected, angry, and low in self-esteem. These negative emotions are believed to further heighten sexual desire and lead to the emergence of DSF. Once DSF are paired with masturbation, their arousal value and the frequency of their use increase. Not only do these deviant fantasies release sexual tension, they also allow the fantasizer to indulge in grandiose thoughts of sexual competence. Such grandiose thoughts function to compensate for any real-life or perceived sexual inadequacies. They also allow the offender to imagine an omnipotent state of control over the victim, to increase his self-esteem, and to heighten his sense of masculinity<sup>3</sup>. In light of the many functions that DSF fulfill, it is scant wonder that they are eventually used in an almost compulsive manner. It is thus that the arousing fantasy is rehearsed over and over until, in the presence of other vulnerability factors – such as stress, intoxication, negative affect, a sexual

<sup>&</sup>lt;sup>3</sup> Although the literature on sex offenders and the criminal justice system clearly point to the existence of both male and female sex offenders, empirical work has focused almost exclusively on males. As an example of this, the masculinity hypothesis outlined above is exclusively applicable to males. Given that prior empirical work is the basis for this manuscript, male pronouns are used throughout to more accurately reflect the current state of the literature.

stimulus – the fantasizer loses control of his behaviour and commits a sexual offense.

Conclusion. To summarize, both models propose that DSF influence offending behaviour. What is also evident from this theoretical review is that the fantasy-to-behaviour path involves other risk factors including behavioural dysregulation, negative affect, and cognitions. Three important antecedents to sexual offending – impulsivity, personality features (i.e., psychopathy and narcissism), anger, and offense-supportive cognitions – will be reviewed in greater detail in the next section.

### **Under What Conditions Do Fantasies Predict Sexual Offending?**

Impulsivity. The DSM-IV-TR defines Antisocial Personality Disorder (ASPD) as a pervasive pattern of antisocial, criminal, and sometimes violent behaviour that emerges before age 15. These antisocial acts are believed to occur in the context of other behavioural indicators such as impulsivity, among others. A subset of individuals diagnosed with ASPD also show psychopathic traits, a constellation of personality features that commonly involves remorselessness, callousness, low anxiety, superficial charm, deceitfulness, etc. (Skeem et al., 2003). The most popular instrument in assessing psychopathy in adults is the Hare Psychopathy Checklist – Revised (PCL-R; Hare, 2003). The instrument contains an interpersonal-affective factor (Factor 1, further divisible into Facet 1 - interpersonal and Facet 2 - affective), and an antisocial factor (Factor 2, further divisible into Facet 3 - impulsive-irresponsible lifestyle and Facet 4 - antisocial lifestyle). Reminiscent of the ASPD criteria, Factor 2 is frequently associated with impulsivity, general sensation seeking, alcohol and drug problems, early and persistent criminal behaviour, and reactive aggression (Skeem, Polaschek, Patrick, & Lilienfeld, 2011).

Despite being a facet of both psychopathy and antisociality, the multidimensional nature of impulsivity and its association to DSF or sexual offending has not been comprehensively

explored. Rather, impulsivity has either been presumed to exist as part of an antisocial lifestyle, or indirectly assessed by the PCL-R Factor 2 items. Thus, further investigation into the different facets of impulsivity is warranted. Of theoretical importance here is the distinction between impulsiveness (fast decision making without forethought, believed to align primarily with the personality trait of psychoticism) and venturesomeness or sensation-seeking (enjoyment of risk taking, found to align primarily with Extraversion) (Eysenck, 1993). PCL-R Factor 2 supposedly taps both impulsivity and sensation seeking. Yet, a side-by-side comparison of these two aspects of impulsivity has not been adequately investigated in the context of deviant fantasies and sexual acting out. Given that impulsivity has infrequently been researched as a stand-alone variable, the review that follows is based on antisociality and/or psychopathy, and their link to sexual offending.

Antisocial / psychopathic features and sexual offending. Previous work has found that the presence of antisocial and psychopathic features was significantly implicated in sexual offending. The sexual recidivists in Hanson and Harris (2000) differed from non-recidivists in their chaotic, antisocial lifestyle. More recently, Hanson and Morton-Bourgon (2005) examined 82 recidivism studies in an attempt to identify variables uniquely predictive of violent and general recidivism that should be addressed in sex offender treatment programs. Not surprisingly, an antisocial orientation (i.e., antisocial personality, antisocial traits) emerged as a key predictive factor of general, violent, and sexual recidivism.

Similarly, psychopathy has been linked to violent sexual recidivism by studies that have found higher psychopathy scores in rapists (Serin, Mailloux, & Malcolm, 2001) and sadistic rapists (Barbaree, Seto, Serin, Amos, & Preston, 1994), but comparatively lower scores in child molesters (Porter et al., 2000). Although both rapists and child molesters have comparable PCL-

R Factor 1 scores, they differ in their endorsement of Factor 2, with rapists exhibiting more antisocial and impulsive facets (Olver & Wong, 2006; Porter et al., 2000). This difference in Factor 2, particularly as it relates to impulsivity, is also reflected in self-reported motivation to offend. In surveying 100 sex offenders who had not yet engaged in any intervention, Mann and Hollin (2007) reported that rapists (n = 35) attributed their offending to grievance, impulsivity, or sexual need, whereas child molesters (n = 65) claimed that sexual gratification, negative emotional states, and need for intimacy motivated their offending behaviour.

Although the association between psychopathy and violent sexual offending seems to be robust, the link between psychopathy and non-violent sexual offending has proven more inconsistent, prompting researchers to conclude that psychopaths tend to prefer sexual offending of a violent nature (Woodworth & Porter, 2002).

Antisocial and/or psychopathic features, sexual deviance, and sexual offending. Recent work has attempted to investigate sexual deviance, sexual offending, and antisociality/psychopathy within the same sample. In a seven-year longitudinal study of sex offenders (N = 68, 33 rapists, 35 child molesters), Serin, Mailloux, and Malcolm (2001) found that 45.6% recidivated in some form, with offenses ranging from breach of conditions to sexual assault against adults or children. Whereas the Factor 2 PCL-R scores differentiated between recidivists and non-recidivists, deviant sexual arousal, as indexed by phallometric testing, did not. Offenders endorsing a high PCL-R score and a high sexual deviance score, however, recidivated sooner and more often than those exhibiting comparable levels of deviance alongside a low PCL-R score. Based on these findings, the authors suggest that risk assessment accuracy for highly deviant sex offenders may improve with the inclusion of psychopathy scores.

The conclusion that sexual deviance was not predictive of recidivism is surprising in light

of findings to the contrary. In their meta-analytic review, Hanson and Morton-Bourgon (2005) concluded that sexual deviancy – defined as deviant sexual interest involving children, rape, or paraphilia, as well as sexual preoccupations and gender dysphoria – and antisocial orientation were both strong unique predictors of sexual recidivism. Of note, they found sexual deviance to be unrelated to non-sexual recidivism, which may explain the seemingly discrepant Serin et al., (2001) results; the highly heterogeneous recidivism variable in Serin et al., which included sexual and non-sexual offenses, was not predicted by deviant arousal. This conclusion is in line with Hanson and Morton-Bourgon's interpretation that deviant sexual interest only predicts recidivism of a sexual kind.

In an attempt to focus more specifically on DSF, psychopathy, and offending, Skovran, Huss, and Scalora (2010) surveyed 199 participants from a maximum security forensic hospital. The sample was comprised of sex offenders as well as patients awaiting competency hearing, civil commitment, sanity evaluations, and NCR offenders. Results from the study indicated that fantasy in general (i.e., deviant and non-deviant fantasy combined) discriminated between psychopathic and non-psychopathic sex offenders. A measure specific to DSF, however, was unable to distinguish between the two sex offender groups. The findings are consonant with other studies suggesting that psychopaths do not generally engage in paraphilic tendencies, but may act on impulse or be motivated by thrill-seeking behaviours to commit a sexual offense. In fact, Skovran et al. (2010) found that, relative to non-psychopathic offenders, psychopathic sex offenders endorsed significantly higher non-sexual sensation seeking.

The trend in the literature thus far reviewed has been to count or score sexual deviance and psychopathy/antisociality scores and assess the extent to which these two risk factors predict sexual offending. Although this line of research is useful in expanding our knowledge of risk

factors, etiological models are crucial to advancing our understanding of the relationship between risk factors and offending behaviour. Regrettably, few of them have been proposed and adequately tested.

More recently, Williams et al. (2008) administered a modified version of the Multidimensional Assessment of Sex and Aggression (MASA; Knight, Prentky, & Cerce, 1994) as well as the Self Report Psychopathy Scale (SRP III) to 88 male undergraduates. The results revealed that self-reported psychopathy moderated the relationship between fantasies and behaviours such that deviant fantasies were more likely to be translated into deviant behaviours in those individuals who endorsed higher subclinical psychopathic features. Interestingly, subclinical psychopathy was related only to fantasies of bondage and sadism, and to self-reported acts of bondage, sadism, and sexual assault. None of the other paraphilic fantasies or behaviours (i.e., fetishism, voyeurism, pedophilia, exhibitionism, frotteurism and transvestism) showed any significant relationship to psychopathy. This pattern of findings greatly mimics the link between psychopathy and violent sexual offending in sex offender samples.

Conclusion. From the research reviewed, it is clear that antisocial and psychopathic features can be conceptualized as risk factor for sexual offending. There is also some indication that the fantasy-behaviour relationship may be moderated by psychopathy. Assuming that impulsivity is part of both antisociality and Factor 2 Psychopathy, one can reasonably anticipate that individuals scoring high in impulsivity will be more likely to translate fantasies into behaviours. In other words, it is hypothesized that high impulsivity will isolate those deviant fantasizers that are most vulnerable to engaging in sexual offending. Given prior work on psychopathy, it is also anticipated that high psychopathy will moderate the link between fantasy and behaviour such that high psychopathy scorers will be more susceptible to acting on their

fantasies. Although not a primary hypothesis, it will be interesting to investigate whether venturesomeness also moderates the fantasy-behaviour relationship.

Anger. Anger is defined as a "negative, phenomenological (or internal) feeling state associated with specific cognitive and perceptual distortions and deficiencies (e.g., misappraisals, errors, and attributions of blame, injustice, preventability, and/or intentionality), subjective labeling, physiological changes, and action tendencies to engage in socially constructed and reinforced organized behaviour scripts" (Kassinove & Sukhodolsky, 1995, p. 7). It is important to recognize, however, that anger can sometimes be a natural and justifiable reaction to circumstances.

The literature on anger makes an important distinction between state-anger and traitanger. State-anger refers to a temporary emotional and physiological condition that is provoked
by situations involving perceived injustice, verbal or physical attacks, etc. (Deffenbacher et al.,
1996; Spielberger, Reheiser, & Sydeman, 1995). Trait-anger has been conceptualized as a stable
personality disposition involving a tendency to experience anger. Individuals endorsing high
levels of trait anger (a) are more easily angered, (b) react with more intense anger, (c) cope
poorly or in dysfunctional ways with their anger, and (d) experience more frequent and more
severe negative consequences as a result of dealing ineffectively with their anger (Deffenbacher
et al., 1996; Spielberger et al., 1995). Little distinction has thus far been made between state and
trait anger and their respective influence on sexual offending and deviant fantasies. There is good
reason to distinguish between the two on the back of unconvincing findings that state more so
than trait anger may be tied to sexual offending (Howells, Day, & Wright, 2004).

Anger shares a close relationship with aggression, which is defined as "destructive or punitive behaviour directed towards other persons or objects" (Spielberger et al., 1995, p. 52).

Experts emphasize that, although anger may be an antecedent to violent and aggressive acts, it is neither necessary nor sufficient to produce aggression or violence. This specification becomes relevant when considering that violence in psychopathic offenders tends to be dispassionate and instrumental (i.e., instrumental aggression), which is qualitatively different from aggression that emerges out of angry feelings (i.e., hostile aggression). Moreover, there are many instances when episodes of anger do not translate into aggression.

Hostility is another construct that has at times been used interchangeably with anger or aggression. The term generally refers to a negative attitude that is often accompanied not only by anger, but also by disgust, resentment, contempt, cynicism, suspicion of others, etc. Clearly, hostility is a more complex construct compared to anger in that it involves a set of beliefs or attitudes that motivate a desire to cause harm, punish, or destroy (Ramírez & Andreu, 2006).

Anger and sexual offending. There is growing evidence that anger is an important contributing factor for sexual offending. Research has shown that for at least some male offenders, there seems to be an etiological relationship between anger and sexual offending (Howells et al., 2004). A comparable finding between anger and sexual acting out has also been reported in female sex offenders (Cortoni & Ford, 2008). Although the exact mechanisms of its influence are unknown, it is reasonable to hypothesize that anger may increase the likelihood of violence when it co-occurs with other factors (Howells, 2004).

Hanson and Harris (2000) examined dynamic predictors of recidivism in a sample of sex offenders (208 recidivists and 201 non-recidivists) convicted of at least one offense involving sexual contact with the victim. After reviewing case files and interviewing parole officers, the authors concluded that anger tended to precede engagement in re-offending behaviour.

Importantly, anger was not a stable predictor but rather an acute dynamic factor, meaning that

state anger rather than trait anger predicted recidivism.

There have only been a handful of studies looking at trait-anger and thus far, their conclusions are mixed. Howells and colleagues (2004) point out that some factors – such as the use of heterogeneous samples with a larger number of instrumental aggressors relative to hostile aggressors – may be clouding a trait-anger-sexual aggression relationship in sex offenders. Alternatively, as concluded by Hanson and Harris (2000), it is conceivable that state-anger alone but not trait-anger, influences sexual offending. Yet another possibility is that state-anger may be a more powerful predictor of offending behaviour for a subset of individuals already exhibiting certain risk factors. Clearly, more studies are needed to understand how state- and trait-anger contribute to sexual offending.

In non-offender samples, studies have shown that hostility is closely related to sexual offending. Using a large sample of male undergraduates, Malamuth, Sockloskie, Koss, and Tanaka (1991) studied the characteristics of sexual, non-sexual, or both types of aggression against women. The authors reported that hostile masculinity – a latent construct composed of three measures (negative masculinity, hostility towards women, and adversarial sexual beliefs) that tap on coerciveness in general and coercion against women – moderated the relationship between sexual promiscuity and sexual aggression. The effect size of the interaction term reached an eta-squared value of .04, which is categorized as a small to medium effect based on Cohen's guidelines (1992).

Anger, DSF, and sexual offending. The association between anger and sexual offending has also been investigated within the context of deviant fantasies. For example, McKibben, Proulx, and Lusignan (1994) asked 22 sex offenders (nine pedophiles and 13 rapists) to fill out the Fantasy Report – a self-report of sexual fantasies, behaviours, and moods – every two days

for a period of 60 days in total. They included anger among the negative moods and found that such dysphoric moods could activate deviant fantasizing (in both rapists and pedophiles) and masturbatory activities while fantasizing (in rapists only). Among the emotions most commonly reported in rapists were loneliness (reported 64 times), humiliation (reported 46 times), and anger (reported 41 times). Compared to rapists, pedophiles were more likely to report loneliness (reported 34 times) and oppression (reported 16 times). In a similar vein, Looman (1995) found that child molesters were more likely to fantasize about a child when they were angry. They fantasized about an adult, however, if they were happy, had a good day, or were feeling romantic.

Together, the trend of these findings suggests that offenders may fantasize deviantly as a way of coping with negative moods. To test this contention, Cortoni and Marshall (2001) developed the Coping Using Sex Inventory, and administered it to sex offenders across three studies. Results from their investigation revealed that rapists and child molesters made greater use of DSF than do violent offenders when in a difficult, stressful, or upsetting situation. Under such circumstances, sexual activity, including the use of DSF, is believed to offer temporary relief. This conclusion is consonant with suggestions that deviant fantasizing functions as way of regulating affect by alleviating negative mood, elevating ambivalent states, or enhancing positive mood (Gee et al., 2003). The benefits of using DSF are, however, short-lived, and the strategy backfires. Indeed, Looman (1995) observed that the more the child molesters in his study engaged in deviant fantasizing, the more dysphoric their moods became, which led to more DSF. Eventually, the cycle may spiral out of control such that subsequent increases in dysphoric mood heighten the risk of re-offending (Looman, 1995).

Conclusion. To summarize, research has demonstrated that anger is a risk factor for

sexual offending, and that anger, DSF, and sexual offending can covary within the same sample. On the basis of the evidence presented, it is hypothesized that high trait-anger will isolate a subset of deviant fantasizers who are most susceptible to acting out their fantasies. Although not part of the primary hypothesis, the extent to which state-anger moderates the fantasy-behaviour relationship will also be investigated.

Offense-supportive cognitions. In the sex offender literature, offense-supportive cognitions have been defined as "learned assumptions, sets of beliefs, and self-statements about deviant sexual behaviours such as child molestation and rape which serve to deny, justify, or minimize or rationalize an offender's actions" (Bumby, 1996, p. 38). Thus, offense-supportive cognitions are believed to mitigate a certain level of guilt, shame, or anxiety that follow those behaviours deemed socially unacceptable (Bumby, 1996).

Offense-supportive cognitions are thought to originate from schemas or implicit theories, which are formed from our interactions with others during early childhood. Schemas affect cognitive processes in a number of ways including "... [guiding] our attention, [informing] our perceptions, [prompting] our inferences, and... [providing] shortcuts to interpreting social situations" (Mann & Beech, 2003, pg. 139). These schemas are believed to generate and organize cognitive distortions (Polaschek & Gannon, 2004), and can occur before and after an offense has been committed.

Offense-supportive cognitions and sexual offending. Evidence from sex offender samples suggests that offense-supportive cognitions play an important role in sexual offending. Compared to non-recidivist, sex offender recidivist believe that sexual crimes can be justified and think that they are entitled to engage in such acts (Hanson & Harris, 2000). In the Hanson and Harris study, rapists tended to display rape-supportive attitudes whereas child molesters

26

tended to endorse a sexualized view of children, but the two groups of sex offenders did not differ appreciably in their offense-supportive cognitions. Similarly, Bumby (1996) found that rapists and child molesters did not differ in their endorsement of rape-supportive cognitions, but did score in predictable ways on a scale that measured child-molesting attitudes. It was suggested that the pattern of scores might be reflecting a society-wide perception that sexual aggression against adult women is less aversive than child molestation.

In non-offender samples, Dean and Malamuth (1997) administered a rape-myth acceptance scale alongside questionnaires assessing self-reported sexual aggression and self-reported likelihood to rape, the latter being considered an indirect measure of sexual aggression. Results from the 323 male undergraduates in the study suggested that rape-supportive cognitions were significantly related to past sexual aggression as well as to a likelihood of committing sexually aggressive acts. In view of these findings, the researchers speculated that offense-supportive might function to lower social constraints against the commission of a sexual offense.

In light of the importance of offense-supportive cognitions in sexual offending, research into child sex offenders and rapists has outlined five core implicit theories or schemas. Based on a review of cognitive distortion scales, Ward and Keenan (1999) suggested that child-sex offenders hold five main schemas that seemingly legitimize engaging in a sex act with a child: a) Children as sexual objects, b) Entitlement, c) Dangerous world, d) Uncontrollability, and e) Nature of harm.

Rapists have also been found to hold five main schemas or implicit theories. Polaschek and Gannon (2004) tested out the five core implicit theories that had emerged from their earlier work on a sample of 37 imprisoned rapists with victims older than 16. They found support for all five schemas: a) Women are sex objects (endorsed by 70% of offenders), b) Entitlement

(endorsed by 68% of offenders), c) Women are dangerous (endorsed by 65% of offenders), d)

Dangerous world (endorsed by 19% of offenders), and e) Male sex drive is uncontrollable
(endorsed by 16% of offenders). At the center of this schema is the idea that men's urges cannot be controlled. Offending is believed to occur because there was a loss of control over these urges.

In comparing the two sets of schemas, there are a few important things to note. First, the offense-supportive cognition that children or women are sexual object is clearly axiomatic of sexual abuse and rape. At the core is the idea that women or children desire sex and will likely enjoy contact with the offender.

The second observation relates to the role of entitlement, the idea that the offender has a right to have sex with whomever he desires. He believes he is superior and therefore entitled to use what he perceives are less important individuals (i.e., women or children) to satisfy his urges. Given that entitlement is commonly linked to narcissism (e.g., DSM-IV-TR criteria for NPD), it is possible that narcissism could play an important role in sexual offending. Although not widely researched, such a suggestion is not new, with Dean and Malamuth (1997) demonstrating that traits linked to narcissism, specifically a dimension of dominance relative to nurturance, differentiated between men who aggress sexually and those who imagine aggressing. In a similar vein, Meloy (2000) suggested that the sexual homicide perpetrators he reviewed (N = 28) were pathologically narcissistic, as evinced by their sense of entitlement.

Offense-supportive cognitions, deviant sexual interest and DSF. Implicit theories of child-sex offenders have been at the root of growing interest in adapting implicit measures of association to screen for pedophilic tendencies in sex offenders. For example, the Child-Sex IAT (Gray, Brown, MacCulloch, Smith, & Snowden, 2005) is based on the schema of perceiving

children as sexual objects.

Using the Child-Sex IAT, Gray and colleagues (2005), tested 18 child sex offenders and 60 non-child sex offenders (no convictions for offending against children under 16). As expected, they found a stronger cognitive association between child and sex in child-sex offenders, relative to controls (i.e., non-child sex offenders). Specifically, child sex offenders demonstrated faster reaction times when the child and sex concepts shared the same response button, whereas the control group showed faster reaction times when the adult and sex concepts shared the same response button. Results revealed that child molesters show strong cognitive child-sex associations, suggesting that they sexualize children.

Mihailides, Devilly, and Ward (2004) tested the implicit belief of uncontrollability of sexuality and sexual entitlement in addition to children as sexual beings. Compared to non-offenders (undergraduate students), child sex offenders showed a stronger implicit association for all three cognitions. When child-sex offender results were compared to non-sex offenders, only the uncontrollability of sexuality and children as sexual beings differentiated between the two groups.

Following the stability of the Child-Sex IAT findings, one may wonder why a Woman-Sex IAT has yet to emerge from the empirical literature. Given that an association between women and sex is expected to emerge in controls as well as rapists, the implicit theory of women as sex objects is not easily amenable to the IAT paradigm.

As evinced by the IAT findings presented above, a lot of the empirical attention in sex offender research has focused on forensic applications of the implicit association model, which is thought to capture cognitive distortions and indirectly tap on deviant sexual interest. Although DSF and deviant interest are not interchangeable constructs, there is a high degree of overlap in

that fantasies maintain interest (Akerman & Beech, 2011). As such, DSF are expected to play a role in the cognitions of an offender.

A handful of studies have looked at fantasies and cognitive distortions, noting the close association between the two. In fact, Gee and colleagues (2003) propose that fantasies may in fact function as cognitive distortions to help offenders cope. These researchers argue that DSF help with rationalizing an offense and overcoming feelings of guilt or shame, a function that closely mimics the role of cognitive distortions. Furthering the idea that fantasies and cognitive distortions are closely related is the work of Zurbriggen and Yost (2004). The authors asked 162 non-offender participants (85 men and 77 women) between the ages of 21 and 45 to describe two sexual fantasies and complete a number of instruments, including a rape-myth acceptance measure thought to capture rape-supportive cognitive distortions. They reported that men's fantasies of dominance were associated with a greater acceptance of rape myths, whereas fantasies of submission were unrelated to such problematic attitudes.

Offense-supportive cognitions, DSF and sexual offending. Research assessing the covariance of cognitive distortions, deviant fantasizing, and sexual offending within the same sample is limited. In a highly specific sample of extra-familial sexual child molesters (N = 44), Proulx and colleagues (1999) investigated several pre-offense disinhibitors, including DSF and cognitive distortions. Based on official sources (e.g., police records) and assessment reports, results showed that 12 hours prior to the commission of the index offense, 54.6% of the offenders had utilized cognitive distortions to justify sexual contact with a child, whereas 34.1% had engaged in deviant fantasizing. Further, DSF and cognitive distortions were the disinhibitors most frequently experienced by these offenders. When the authors distinguished between coercive child sex offenders and non-coercive offenders, they found that the latter were more

likely to use DSF and pornography than the former. The presence of offense-supportive cognitions, however, did not distinguish between the two types of offenders. The differential impact of DSF and cognitions on offending is important to note in light of earlier suggestions that deviant fantasies may be highly correlated with cognitive distortions.

**Conclusion.** Taken together, the findings point to offense-supportive cognitions being a risk factor for sexual offending. There is also support for the contention that offense-supportive and deviant fantasies are correlated. Depending on the magnitude of the correlation between DSF and cognitive distortions, a moderated or a mediated relationship may be hypothesized. If the two concepts are not highly related, then mediation can be ruled out. If, on the other hand, DSF and cognitive distortions are highly correlated (i.e., r > .9), a mediated relationship may be at play. Based on the earlier argument regarding the role of narcissism, it is also hypothesized that narcissism will moderate the fantasy-behaviour link.

## **Refining the Current Literature**

The current investigation sought to refine the literature on deviant fantasies and sexual offending in a number of ways. At a methodological level, the study improves on several limitations. The next section begins with an outline of a few validity concerns in the existing body of literature, followed by the solutions that were implemented in the current study.

Challenges to internal validity. In correlation research, internal validity refers to whether the relationship between two variables is due to a third variable that may be correlated with the predictor, or the outcome, or both, but is not a conceptual replacement for the predictor or the outcome (Mitchell, 1985). The criterion of conceptual replacement depends on whether the third variable is used to theoretically define either the predictor or the outcome. An important validity concern in the extant body of literature was the limited statistical control of several third

31

variables that have been found to affect the relationship between deviant fantasies and behaviours.

Social desirability. One such concern related to the inconsistent use of social desirability measures (e.g., Daleiden, Kaufman, Hilliker, & O'Neil, 1998; Looman, 1995; McKibben et al., 1994; Proulx et al., 1999; Skovran et al., 2010). Whereas most researchers would readily admit that social desirability may have attenuated the findings, only some of them included an instrument to assess the extent of its presence. Understandably, many experts in the field argue that not measuring socially desirable responding can cast serious doubts over the findings. For example, lower rates of pedophilic fantasies may be reported by offenders and non-offenders out of fear of social repercussions or legal implications. On the other hand, statistically controlling for socially desirable responding can increase confidence in the associations demonstrated. As such, the present study included a measure of social desirability in order to statistically partial out social desirability.

Pornography use. A few other third variables have been implicated in the relationship between DSF and sexual offending but they are not consistently measured. For example, research has found that pornography is intimately related to sexual fantasies, in that it provides rich material and themes for fantasies to appropriate and build on (Howitt, 2004; Leitenberg & Henning, 1995). Across numerous studies, pornography use has also been implicated in sexual offending. For example, Gee and colleagues (2003) found that pornography was linked to the development, maintenance, and/or escalation of sexual offending for a large number of offenders. And yet, the inclusion of pornography in the literature is quite limited (e.g., Deu & Edelmann, 1997; McKibben et al., 1994). In view of the relationship between pornography, fantasies, and sexual offending, the present study recognizes the importance of partialing out any

effects this variable has on the fantasy-behaviour relationship. Consequently, a measure of pornography will be included as part of the test package.

Hypersexuality. Another important variable that has seen limited inclusion in the current literature is hypersexuality. Although variously referred to as sexual addiction, sexual impulsivity, or sexual compulsivity to highlight the hypothesized impulsive or compulsive etiology of the condition, the exact mechanism underlying hypersexuality has been elusive. As such, the author opted for the atheoretical construct of hypersexuality, which recognizes the distress of individuals presenting with hypersexuality concerns, but does not attempt to explain the condition in terms of impulsivity or compulsivity. In their seminal paper, Kingston and Firestone (2008) defined hypersexuality as "a loss of control over sexual fantasies, urges and behaviors, which are accompanied by adverse consequences and/or personal distress" (p. 284). It is important to emphasize that not everyone with a high sex drive is necessarily distressed about his/her sexual pursuits. The label hypersexuality, however, is reserved for individuals who seek assistance in order to help control very frequent or hyper sexual urges and behaviours that have negatively impacted different aspects of their lives.

The inclusion of hypersexuality as a control variable follows research linking the construct to sexually coercive behaviour. To illustrate, Johnson and Knight (2000) showed that hypersexuality was closely related to misogynistic fantasies, and in turn, the two play an important role in facilitating sexually coercive behaviour. Thus far, studies have not included this variable consistently. Considering the influence that hypersexuality may have on the outcome variable in the present study, a scale was included to partial out any effects previously attributed to this factor.

Challenges to construct validity. Construct validity refers to the degree to which an

assessment instruments captures the targeted construct (Mitchell, 1985).

**Definition.** A major area of concern related to this aspect of validity is the inconsistent terminology used to identify DSF, which has made comparisons across studies difficult. For example, if one study defines DSF as thoughts that are story-like, whereas another study defines them as brief, fleeting lustful thoughts, then higher admission rates of DSF can be expected from the second study compared to the first. Furthermore, the influence of a brief lustful thought on sexual behaviour probably does not equal the effect that elaborate, story-like fantasies have on behaviour. It is logical to assume that the latter (i.e., story-like fantasies) may provide more of a chance to rehearse offense planning than the former (Bartels & Gannon, 2011). As a way of improving on this shortcoming, the present investigation defines DSF as sexually arousing thoughts of a paraphilic nature that are story-like.

*Measures.* Adding to construct validity concerns is the use of a single explicit measure to capture a construct of interest.

Use of a single measure. In a typical DSF study, a single measure of deviant fantasies asks participants to indicate how frequently they have experienced or engaged in a series of deviant fantasies. There are two problems immediately evident with this approach: (a) using a single measure, (b) using only an explicit measure. Many have called into question the interpretation of a single measure as an index of a specific psychological attribute (Banse, Schmidt, & Clarbour, 2010). Greater confidence can be achieved by using multiple assessment instruments that converge on an index score.

*Use of an explicit measure*. Second, the use of an explicit self-report instrument in the absence of other measurers raises a number of concerns (see Snowden et al., 2011, for a more detailed discussion). Critics worry that self-report inventories assume that the information the

participant reports on is readily available to them. Another issue is that some participants may lack the insight to adequately report on their behaviours or attitudes. Alternatively, they may think they are honest but may in fact be giving inflated self-descriptions. In turn, this deficit in insight may result in both over and underestimation of paraphilic activity. Even if the participants have the insight required to self-report on their attitudes or behaviours, they may be motivated to disguise their thoughts and actions fearing legal implications, embarrassment or societal disapproval.

Considering these caveats, other measures are needed in addition to explicit inventories that have a more indirect assessment approach. Both the Viewing Time task (VT) and the Implicit Association Task (IAT) tasks have emerged as early candidates to assess deviant sexual interest in a less direct way than explicit instruments do. Although an argument can be made that VT tasks have greater face validity or greater transparency than IAT, the utility of both paradigms has been investigated with some success in child sex offenders. To date, the evidence from indirect measures employed with sexual offenders suggests that: (a) these measures are less susceptible to faking than explicit measures, although not impossible (Gray et al., 2005; Gray & Snowden, 2009); (b) the IAT captures automatic associations held by the person even if the person does not explicitly endorse such an association (Gray & Snowden, 2009); (c) the accuracy of indirect measures rivals that of PPG (Snowden et al., 2011); (d) they can distinguish between known groups of offenders (Snowden et al., 2001); and (e) combining indirect methods with direct instruments achieves higher predictive power than any single such test (Banse et al., 2010). Further, Akerman and Beech (2011) opined that a more complete picture of DSF may emerge as a result of combining direct and indirect assessment methods. In turn, a successful multi-method assessment of DSF has implications for assessment, risk assessment, treatment

targets, and theory building (O Ciardha, 2011). Following these recommendations, the present study employed a self-report inventory as well as four indirect tasks, two Viewing Time (VT) tasks and two Implicit Association Tasks (IAT), to capture the construct of deviant fantasies and deviant sexual interest.

**Challenges to statistical inference.** Statistical conclusion validity refers to the use of reliable measures and appropriate statistical tests (Mitchell, 1985).

*Type II error*. A prevalent issue associated with Type II error is the dichotomization of scores, which usually compromises the meaning of the results (e.g., Curnoe & Langevin, 2002; McKibben et al., 1994; Proulx et al., 1999; see Kraemer et al., 2001, for a different perspective on dichotomization). An obvious solution to this would be the use of measures in their continuous form.

Sample size was also noted to be insufficient in most studies, which in turn, limits the power to detect any significant differences or associations, provided they are really there (e.g., Dandescu & Wolfe, 2003; Deu & Edelmann, 1997; Gray, Watt, Hassan, & Macculloch, 2003; Serin et al., 2001; Templeman & Stinnett, 1991). In forensic samples, the problem of a small sample size is sometimes unavoidable given current sex offender base rates. There is more flexibility in recruiting non-forensic samples, although again, base rates are low and a large sample of males is needed in order to have a sufficient number of "admitters" among them.

Unreliable measures. A second limitation related to statistical conclusions validity is the use of measures that provide unreliable data. A number of critics are concerned that data from some of the measures selected either have inadequate psychometric properties or their psychometric properties are completely omitted from the discussion (McCoy & Fremouw, 2010). For example, reliability and validity information were not provided on a few instances when the

36

measures were created by the study authors (e.g., Looman, 1995; McKibben et al., 1994; Proulx et al., 1999). On some occasions, the psychometric properties reported were insufficient (e.g., Cortoni & Marshall, 2001; Smith, Fischer, & Watson, 2009). In light of the reliability and validity concerns outlined above, the current study employed well-researched measures with adequate psychometric properties.

### **Extending the Current Literature**

From a theoretical standpoint, the current study aimed to extend the literature on deviant fantasies and sexual offending in a number of ways. The next section highlights some of the rationale and implications of studying non-forensic samples.

Sex offense and DSF frequency in non-forensic samples are not negligible. Few studies to date have examined deviant fantasies and behaviours in community samples. This kind of research is of value to the field, especially since base rates of having committed at least one illegal sexual behaviour are not trivial, ranging from 65% (Templeman & Stinnett, 1991) to 74% (Williams et al., 2008) for any sexual misconduct or deviant sexual behaviour, 15-25% for sexually coercive behaviour (Chapleau & Oswald, 2010; Malamuth et al., 1991), 30-35% showing a behavioural propensity toward sexual aggression (Dean & Malamuth, 1997) and child molestation (Gannon & O'Connor, 2011), and a significant number of non-forensic males endorsing rape myths that have consistently been associated with the perpetration of sexual aggression in sex offenders (Dean & Malamuth, 1997). Moreover, only a fraction of rapes and cases of molestation are reported and only a portion of those result in a successful conviction (Heil & Simons, 2008). Consequently, a substantial number of individuals who have engaged in deviant sexual behaviour remain outside the reach of the forensic system and prison-based studies.

*Developing prevention strategies.* Some authors have speculated that among sex offenders and non-offenders, aberrant sexual fantasy and behaviour are not qualitatively different from each other; rather, any differences lie in the degree to which the former engage in fantasies and behaviours (Gray et al., 2003). At present, more research is needed to clarify the nature of the relationship between DSF and aberrant sexual behaviour in non-offenders. Once the fantasy-behaviour relationship is better understood, preventive efforts need to be directed to those non-offenders most at risk. For example, individuals showing frequent use of deviant fantasies and a past willingness to engage in relatively harmless sexual behaviours such as frottage or voyeurism may be recommended for therapy. Furthermore, those that show other risk factors such as a propensity towards anger in addition to frequent fantasies and past illegal sexual behaviours, may be targeted first as most at risk of recidivating.

Investigations of non-offender samples can also be very informative in highlighting mechanisms that protect against engaging in sexual offending (Bartels & Gannon, 2011; Gannon & O'Connor, 2011). For example, low impulsivity may inhibit the translation of deviant fantasies into deviant sexual acts.

A developmental perspective. Studying university students may provide a chink in understanding criminal offending from a developmental perspective. Statistically, a fraction of the male participants will commit some kind of sexual offense, and this is most likely to occur between the ages of 20 and 40. Given that the age of the male participants in the current study will probably range between 17 and 20, and that the majority of male undergraduates have high rates of deviant fantasies, then it stands to reason that among the participants tested there will be a few individuals who are on the road to becoming real paraphiliacs and/or sex offenders.

Closing the male-female research gap. The generalizability of results form the previous

literature is hampered by the repeated omission of female sex offenders and non-offenders from a significant number of studies. For example, Snowden and colleagues (2011) point out that neither the Child-Sex IAT, nor Viewing Time tasks, have been extended to female offenders. It is possible, they argue, that the child-sex association pattern found in male sex offenders may not replicate in female sex offenders because females may offend for reasons other than sexual attraction. A lack of female participants is also visible in non-offender studies (Ahlers et al., 2011; Gannon & O'Connor, 2011; Williams et al., 2008). In the present study, data was collected on both male and female undergraduate students. Although, given the lower base rates of deviant sexual acts in females, the analysis was conducted only on males, the data is summarized in Appendix H. Due to the lower base rates, a different data analytic approach will be needed to analyze scores obtained from female participants.

Part of the reason for this omission could be related to (a) a commonly held belief that females who sexually offend do so under the guidance of their male partners, and/or (b) base rates of female sex offenders are very low. Are females capable of engaging in deviant sexual behaviours on their own, not coerced by males? Experts have pointed out that female deviance does occur even in the absence of male influence, but that society has only recently acknowledged its incidence (Ford & Cortoni, 2008). As a result, many are still unwilling to label deviant sexual behaviour in females as such. For example, sexual relations between an older woman and an adolescent male are viewed as initiation whereas the same behaviour would be highly problematic if it were an older male engaging in sexual activity with an adolescent female. With respect to base rates, although they are comparatively low compared to male sex offenders, experts warn that: (a) as demonstrated in the example provided a few lines above, sex offenses in females don't tend to be labeled as such; (b) females may be more adept at hiding

child sex abuse, especially in the context of child care; and (c) current instruments used to assess female deviance including fantasies, interest, arousal, etc., are based on males. Even with inadequate assessment measures, female sex offender show equally high levels of cognitive distortions and difficulties in emotion regulation (including anger) as male sex offenders (Ford & Cortoni, 2008).

Ultimately, the exclusion of females from studies investigating DSF and sexual offending means that the extent to which the observed relationships between the variables reviewed in this manuscript can also be found in non-offender females remains an empirical question. The present study attempted to close this gender gap by opening the study to both male and female undergraduates.

Drawing more accurate comparisons and conclusions. There are obvious forensic implications to studying non-forensic samples. One reason is to gain a better understanding of the sample characteristics and prevalence rates before comparing them to sex offenders (Templeman & Stinnett, 1991). Presently, there is a dearth of reliable data on the frequency of DSF and behaviours in non-offenders (Ahlers et al., 2011). Regrettably, research to date has focused almost exclusively on male sex offenders who are either incarcerated or residing in inpatient facilities. It has been argued that incarcerated sex offenders may develop ways of thinking and feeling as a consequence of their prison setting. For example, critics suggest that reports of loneliness, lack of intimacy, and even fantasy content may depend on the setting. In turn, these dysphoric moods deviant thoughts can taint pre-offense recollection of emotions and fantasies (Cortoni & Marshall, 2001; Langevin et al., 1998; McCoy & Fremouw, 2010). In inpatient or in-treatment samples, findings are further clouded by participation in relapse prevention and sex offender treatment programs (Gee et al., 2003). Within a therapeutic context,

offenders are encouraged to discuss their fantasies, which in turn increases the availability of DSF in awareness and leads to false reporting of high DSF among offenders.

As a result of an exclusive focus on sex offenders, there is a paucity of non-offender control groups. While some studies will have non-sex offender controls, a significant number of studies are completely lacking non-offender groups (e.g., McKibben et al., 1994; Proulx et al., 1999). McCoy and Fremouw (2010) maintained that the most important control group in sex offender studies is the inclusion of a non-sex offender group. It can be further argued, however, that absent a non-offender control group, there is a risk that the pattern of relationships between fantasies and various risk factors, are not unique to sex offenders and their offending behaviour. If their relevance to sexual offending is not established, then there are major implications for their utility in treatment and preventative efforts. As an example, if deviant fantasies and cognitive distortions are found to be highly prevalent in 'normal' controls and this relationship is not predictive of sexual offending, then perhaps efforts to address these two factors in sex offender treatment may not be a priority. Or, perhaps the use of DSF and cognitive distortions to screen out future offenders or assess risk of recidivism of current offenders is not warranted. In light of these implications, it is of paramount importance to test out forensic formulations related to DSF and sexual offending in non-forensic samples.

Guided by a similar logic, Gray et al. (2003) tested out a finding by Burgess, Hartman, Ressler, Douglas, and McCormack (1986) that certain behavioural and experiential indicators are etiologically related to sexual homicide. The authors first developed normative data from healthy and presumably non-offending controls before comparing them to the sex offenders in the Burgess et al. (1986) study. Prevalence rates of indicators revealed that behavioural indicators but not experiential indicators occurred at different rates in sexual murderers and undergraduates.

Next, using sadistic fantasies as a proxy for sexual homicide, the authors surveyed 50 undergraduates on measures comparable to those used by the original study and found that behavioural indicators (e.g., antisocial behaviours) successfully discriminated between sadistic sexual fantasizers and non-fantasizers. Contrary to Burgess et al.'s (1986) suggestion, however, experiential indicators (e.g., nightmares, enuresis, etc.) failed to differentiate between the two groups. The evidence from the Gray et al. (2003) study nicely illustrates the need for nonoffender controls and speaks to how easily studies that focus exclusively on forensic samples can provide distorted results in the absence of control groups. In that study, the comparison between controls and sexual murderers was critical for isolating factors that were uniquely predictive of murder (or fantasies). At a more general level, Gray et al.'s study (2003) heightens fears that relationships observed in forensic samples are not unique to sex offenders and may be observed in non-offenders as well. As an example, Polaschek and Gannon (2004) expressed concern that the implicit theories resulting from their interviews with rapists may also be held by nonoffending men and women. Consequently, they urged researchers to investigate the existence of these schemas in community controls, in order to ascertain whether the implicit cognitions identified are exclusive enough to inform future treatment efforts and risk assessment.

Although the present investigation was not directly associated with a comparable study in a sex-offender sample, the results will likely inform forensic theories and techniques and be applicable to non-offenders in as far as preventative efforts are concerned. In addition, this study may yet serve as a control condition for future studies conducted with sex offender samples.

### **CURRENT STUDY**

### **Objective of Current Study**

The present investigation sought to explore the extent to which the relationship between

DSF and aberrant sexual behaviours is moderated by three risk factors tested separately: impulsivity, anger, and offense-supportive distortions. Based on the literature reviewed, all three of these factors can potentially isolate a subset of individuals who are most susceptible to acting on their deviant fantasies.

### **Operationalization Concerns**

Socially desirable responding. As discussed earlier, the literature on DSF needs to be qualified in light of socially desirable responding. Attempts to deal with this construct have ranged from employing a measure of social desirability, to using implicit paradigms such as the IAT, to simply acknowledging the presence of socially desirable responding but not taking any statistical precautions in return. In fact, the inconsistent ways in which DSF researchers have dealt with socially desirable responding is one of the most widely cited limitations that cast current findings into doubt (McCoy & Fremouw, 2010).

In view of this limitation, the influence of socially desirable responding in the current study was mitigated by (a) the use of implicit measures (IAT and VT), which are believed to be less vulnerable to response distortions (Gray et al., 2005; Gray & Snowden, 2009), (b) the administration of a measure that captures socially desirable responding, and (c) the use of direct and indirect measurement of aberrant sexual behaviours. Although greater precautions are being taken to accurately capture DSF and aberrant sexual behaviours, it can be argued that the moderators in the current study do not require the same amount of protection against desirable responding because the implication of admitting to being impulsive (for example) are not as disturbing or cognitively dissonant for some as admitting to having an interest in pedophilia or sadism.

Cross-specificity question. The few studies that have investigated the extent of cross-

specificity in the fantasy-behaviour relationship have found that aberrant sexual behaviours correlate more highly with corresponding fantasies than with any other fantasy category (Williams et al., 2008). This finding would be consonant with the sexual preference hypothesis (Abel & Blanchard, 1974), which proposes that offenders who commit a certain offense have a preference for that particular behaviour. For example, in line with this hypothesis, men who rape women are deemed to have a preference for coerced sex. Evidence for the sexual preference hypothesis is, however, mixed. Although there seems to be some degree of cross-specificity in sexual deviance, the correlation between a sexual act and its corresponding fantasy is not large as that implied by the sexual preference hypothesis, possibly because: (a) other risk factors play a role in this relationship, (b) instruments that capture cross-specificity have not yet been psychometrically established, (c) multiple paraphilias are not uncommon (Heil & Simons, 2008), and/or (d) deviant sexual behaviour may sometimes be enacted because it is convenient; a deviant preference for that particular behaviour is not necessary. For example, studies have found that not all child sex offenders endorse pedophilic preferences (Seto, 2009). The current investigation focused on other risk factors that create conditions under which the fantasybehaviour correlation is higher. For the sake of discussion, however, it is worth delving briefly into (b).

From a methodological perspective, assessing the extent of paraphilic cross-specificity is impeded by the paucity of valid instruments. With scholarly research focusing almost exclusively on rape and pedophilia, it is scant wonder that the other paraphilias have received such limited empirical and psychometric attention. Owing to this skewed focus, measures that tap exclusively on fetishism (for example) have yet to be validated. To date, typical assessments of sexual deviance consist of a list of fantasies and behaviours, some of which may contain as

little as one or two items per paraphilia. Although this one or two-item scale may be valid, its reliability is problematic given the number of items, and its validity may be inadequate considering the likely limited coverage of the construct. Even in measures that are somewhat more specific to rape and pedophilia, the most widely studied paraphilias, distinguishing between rapists and pedophiles on certain constructs has at times proven elusive. For example, Bumby (1996) found that the rape-supportive attitudes highly endorsed by rapists were also found in child sex abuse perpetrators. It is not clear whether the discriminant validity of the measure is the issue, or whether findings that pedophiles are also aroused by adult women (Looman, 1995) can account for this result.

Secondly, compared to DSF prevalence rate, the rates of corresponding paraphilic behaviours in non-offender samples are comparatively low. As a result, the large sample size that is required to investigate specific fantasy-behaviour correspondence in non-offenders is unrealistic. Given these methodological shortcomings, the cross-specificity hypothesis cannot be outright rejected. The balance of the evidence, however, suggests that the DSF-deviant sexual behaviour link is not that simple. Rather, more complex pathways may be at play involving other risk factors that influence that relationship.

For the present study, power-related concerns as well as the earlier argument for existence of multiple paraphilias, motivated the decision to compute an overall DSF index, which serves as the predictor, and an overall deviant sexual behaviours index, which serves as the outcome. The MASA – Behaviour index was a direct measure of sexual acts because it explicitly asked participants to self-report on past sexual experiences. In addition to this, two indirect measures, commonly known as behavioural proclivity scales, were employed to capture the behavioural likelihood of committing rape or molesting a child. These two measures both

served as additional outcome variables. Whereas the MASA – Behaviour Index indexes multiple sexual behaviours, the two proclivity scales are specific to two acts: rape and child molestation. Although both acts are also encompassed within the MASA – Behaviour Index, the proclivity scales have a lower threshold for endorsement given that they measure behavioral tendency, instead of actual behaviour. In addition, as the scales are composed of several items and scenarios, they also have greater variance than the single items on the MASA – Behaviour Index. As such, it was hoped that the two proclivity scales would offer greater insight than the MASA – Behaviour Index into rape and child molestation specifically. There are no equivalent proclivity scales for the other sexual behaviours covered in the MASA. See Table 2 for a list of variables and the measures that were used to capture those variables.

**Type I Error.** To mitigate concerns about Type I error, a data analytic strategy was adapted that aggregated the critical tests for moderation into four regression analyses, corresponding to the four moderators. The exact details of this design are explained further below, in the Method section.

## **Hypotheses**

It was hypothesized that:

- i The influence of DSF on deviant sexual behaviours would be stronger for individuals scoring high in impulsivity.
- ii The influence of psychopathy and narcissism on deviant sexual behaviours would be stronger for individuals scoring high on these traits.
- iii The influence of DSF on deviant sexual behaviours would be stronger for individuals scoring high in anger.
- iv The influence of DSF on deviant sexual behaviours would be stronger for individuals scoring

high in offense-supportive cognitions.

#### **METHOD**

# **Participants**

Two hundred and fifty male and 152 female undergraduate students participated in the current investigation. Participants were University of Windsor students recruited through the University's Participant Pool. They were awarded bonus points commensurate to their participation in the online study.

The median age of male and female participants was 20 (females: Mean = 20.87, SD = 3.63; males: Mean = 21.43; SD = 4.55). Whereas the female participants were primarily second or third year students with 16 to 17 years of education, the male participants were almost evenly split between first, second, and third year (15 to 17 years of education). In most cases, the study participants specialized in health-related fields (psychology, disability studies, etc.). More detailed demographic information on the sample can be found in Table 3.

### **Materials**

See Table 2 for a list of variables and measures that were employed in the current study.

Predictor variables. DSF was assessed explicitly through the Multidimensional Assessment of Sex and Aggression – Fantasy index (MASA – Fantasy index; Knight et al., 1994). Eighteen items from the Sexual Fantasy Questionnaire (SFQ; O'Donohue et al., 1997), and 15 items formulated on the basis of prior research, were added to the MASA scale (see Appendix G for a list of the items). In addition to the self-report measures, an erotic preference for children was implicitly evaluated through the Child-Sex IAT (CSA – IAT; Gray et al., 2005) and a Viewing Time task – Sexual interest in pedophilia (VT – Pedophilia; Banse et al., 2010). A sexual interest in rape was assessed with the Rape Evaluation IAT (RE – IAT; Nunes, Ratcliffe,

Babchishin, & Kessous, 2008). Lastly, a Viewing Time task – Sexual interest in sadomasochism (VT – Sadomasochism) was constructed to evaluate an erotic preference for sadomasochism.

Explicit measure. Multidimensional Assessment of Sex and Aggression (MASA; Knight et al., 1994). The MASA is a well-known self-report inventory that assesses sexual and aggressive thoughts, fantasies, and behaviours (Knight et al., 1994). Since its inception, the MASA has been revised several times and has been used in both forensic and non-forensic samples. For the purposes of this study, only some of its items were used to index fantasies and behaviours of a deviant nature such as bondage, exhibitionism, frotteurism, object fetishism, pedophilia, sadism, transvestism, voyeurism, and sexual assault. This particular selection of items and their classification into a behaviour index and a fantasy index has previously been used by Williams et al., (2008) on an undergraduate sample.

The MASA instructs respondents to answer how often he/she has fantasized about or done a specific act. The frequency of the act is then rated on a 5-point Likert scale ranging from 0 (*Never*) to 4 (*Very often, more than 50 times*). An example of a behaviour item is: "I have been sexually excited by embarrassing or humiliating someone." An example from the fantasy items is: "I think about having a woman struggle during sex". The Fantasy Index was calculated by summing all the fantasy items. The Behaviour Index was computed in the same manner. Higher scores on the Fantasy Index were indicative of more frequent deviant fantasizing. Similarly, higher scores on the Behaviour Index suggested a higher frequency of deviant sexual behaviours.

Williams et al., (2008) reported Cronbach alphas of .86 and .94 for the Fantasy and Behaviour Index respectively. In their MASA validation article, Knight et al., (1994) combine the fantasy and behaviour items used by Williams et al. (2008) into one subscale they label Sexual Deviance/Paraphilia. The internal consistency values presented by Williams et al., (2008)

are comparable to the .91 alpha reported for the Sexual Deviance/Paraphilia subscale (Knight et al., 1994). Further, test-retest reliability for the data from the Sexual Deviance/Paraphilia scale was .86 whereas concurrent validity for this subscale with archival records reached a value of .35 (Knight et al., 1994).

*Implicit measures.* Four implicit tasks, two IATs and two VTs, were used in the present study. The rationale for using implicit tasks, like the Implicit Association Tasks, is that since sexual interest affects cognitive processing of material relevant to that interest, then tasks that tap into such cognitive processes, such as the IAT, should indirectly capture an individual's sexual preferences (Thornton & Laws, 2009).

Child-Sex IAT (CSA-IAT; Gray et al., 2005). The IAT is a response latency-based measure that assesses the relative strength of four associations involving two pairs of concepts. It instructs the participant to classify stimuli that are semantically related to the concepts into one of four categories, as quickly as possible, by using two predetermined response keys. The measurement of implicit associations relies on equal or shared pre-potent valence between concepts. The assumption is that faster and more accurate classifications will be made when categories that share valence (i.e., are more strongly associated), also share a response key. In contrast, classifications are expected to be slower when weakly associated concepts share the same key. An obvious example will help. The CSA – IAT includes the following concepts: child-adult (stimulus words: infant, innocent, kid, school, sweets, toy, vulnerable, beard, grown-up, mature, responsible, wise, work), and sex-not-sex (stimulus words: fuck, lick, cum, cock, kiss, lust, suck, laugh, eye, toe, elbow, run, smile, walk). Participants were instructed to classify the stimulus words under two conditions: (a) when the concepts of adult and sex are paired with one response key, and child and not-sex are paired with the other response key; and (b) when

child-sex are paired with one response key, and adult-not-sex are paired with the other response key. The difference in average response latency between these two conditions is known as an implicit preference or an IAT effect (Snowden et al., 2011). This difference is said to reflect the strength of a cognitive association held by the participant, with the assumption that a strong association reflects a greater degree of preference, at least in as far as deviant sexual interest is concerned (O Ciardha, 2011). To continue with the earlier example, faster classification of stimuli when child and sex are paired with the same key, as opposed to different response keys, would suggest a greater degree of interest in pedophilia.

In line with standard methodology, the task was scored with the improved scoring algorithm provided by Greenwald, Nosek, and Banaji (2003). In a slight departure from the Gray et al. (2005) word list, the stimulus *school* was removed from the list because classifying *school* as belonging to the *child* concept may be counterintuitive to an undergraduate population that is still part of an educational institution and therefore more likely to associate *school* with *adult*. The fear is that the expected faster association between *school* and *child* will not be seen in an undergraduate population, where *school* and *adult* is likely to be the default association. Further, because the validity of the IAT depends on the ease with which stimuli are categorized (Lane, Banaji, Nosek, & Greenwald, 2007), a decision was made to exchange *school* with something more immediately identifiable with *child*. To this end, WordNet, an online lexical database (Princeton University, 2010), was consulted and the word *youngster* was identified as being conceptually related to *child*. In addition, the prevalence of *youngster* in the English language is comparable to the other word stimuli in the *child* list (Harris, 2003).

Gray and Snowden (2009) reported Cronbach alphas in the range of .80 to .87, and a test-retest coefficient of .63. Criterion validity has been demonstrated by administering the Child-Sex

IAT to known-groups of sex offenders. For example, Gray et al., (2005) found that child sex offenders had stronger association between children and sex than they do between adults and sex. Multiple studies have demonstrated that the IAT differentiates between child molesters and non-offenders, as well as between different types of sex offenders (Thornton & Laws, 2009). The task shows moderate sensitivity and specificity, AUC = .73 (Gray et al., 2005). In non-offender samples, Gannon and O'Connor, (2011) administered a pen-and-paper version of the Child-Sex IAT to undergraduates and found self-reported arousal to hypothetical assault scenarios to be significantly related to their IAT. Finally, in his review of indirect measures of sex offender cognition, Snowden et al., (2011) concluded that the IAT appears to be the most promising tool in exploring specific cognitions related to deviant sexual interest, a sentiment echoed by (Thornton & Laws, 2009).

Rape Evaluation IAT (RE-IAT; Nunes et al., 2008). The word list for this IAT comes from the work of Nunes et al., who presented undergraduates students with two paired concepts: rape-not rape (force, injure, ravage, violate, assault, consent, mutual, willing, permission, agreement) and good-bad (vacation, rainbow, smile, sunshine, paradise, rotten, poison, sickness, vomit, evil). More rapid classification of word stimuli when the concept of *rape* and *good* are paired with one response key, as opposed to different keys, suggests a more positive evaluation of rape. Again, the task was scored with the improved scoring algorithm provided by Greenwald, Nosek, and Banaji (2003).

Construct validity of the RE-IAT is supported by a positive correlation with a self-report measure of past sexually coercive behaviour (Sexual Experiences Scale; r = .35) and a measure of likelihood to rape (Likelihood to Rape; r = .41) (Nunes et al., 2008).

Viewing Time measure – Sexual interest in pedophilia (VT – Pedophilia; Banse et al.,

2010). VT measures are based on the premise that participants will look longer at images that they are sexually attracted to. The stimuli for the present VT task were selected from Not-Real-People Visual Stimuli Set, a computer-generated set of images that have been used in previous VT tasks to assess interest in pedophilia (e.g., Banse et al., 2010). The images are neither pornographic nor sexual in nature and are classified according to Tanner stages, ranging form prepubescent children (Tanner stages 1 to 3), to adolescents (Tanner stage 4) and adults (Tanner stage 5). Twenty-four images from a set of 112 (Set 2 – US) were chosen from Tanner stages 1, 2, 3 and 5. The final series of images was made up of 12 target-related images (six prepubescent girls and six prepubescent boys) and 12 target-unrelated images (six adult men and six adult women). The order of the 24 stimuli was randomized.

Deviating somewhat from standard methodology (as described in Banse et al., 2010; Gress, 2005), participants were first presented with a hypothetical scenario (e.g., Suppose you are asked to rate the cover shots of two magazines; one is a travel magazine, the other is a Bondage and Sadism magazine). They then had to evaluate the artistic quality of a series of images on a 5-point Likert scale ranging from 1 (*not at all artistic*) to 5 (*very artistic*), while the time they spent looking at each photo was unobtrusively recorded. A commonly used explicit question asks participants to rate the sexual attractiveness of the images. It was reasoned that the implicit domain might be confounded to some extent by the explicit question of attractiveness. As such, a somewhat unrelated scenario and accompanying question were constructed so as to avoid directly alerting the participant to the implicit nature of the VT task.

In order to score the task, viewing times across all stimuli within a category are averaged and used to index sexual interest as it relates to that particular category. With no set guidelines for scoring VT tasks, two methods have been proposed: (a) ipsative scores (Gress, 2005),

computed by subtracting each category's mean from the overall mean of all categories combined, and (b) averaging reaction times across stimuli within a category (Laws & Gress, 2004). In line with prior research, the two Viewing Time tasks were scored as follows. First, the viewing times across all stimuli within a category were averaged to obtain each individual's raw score for that category. This procedure resulted in four categories for the VT-Pedophilia task (Child Male, Child Female, Adult Female, Adult Male), and three categories for the VT-Sadomasochism task (Landscapes, Woman "submissive," and Woman "dominant").

VT tasks have been validated through a known-group methodology and have been found to successfully differentiate between child sex offenders and non-offenders. For example, Gress (2005) demonstrated that a VT task consisting of computer-generated male and female images at ages 5, 9, 13 and *adult*, performed well in identifying offenders with child victims, showing an accuracy rate of 84%. Banse et al., (2010) reported Cronbach alpha values of .85 (boys category, Tanner stages 1-3), .77 (girls category, Tanner stages 1-3), .85 (men category, Tanner stage 5), and .86 (women category, Tanner stage 5). The VT task employed by Banse and his colleagues (2010) correctly classified 80% of child sex offenders. Combined with explicit measures, the implicit measures (VT and IAT), and correctly classified 90% of child sex offenders (Banse et al., 2010). When compared to PPG, VT tasks have been found to be just as reliable and valid, correctly classifying 91% of child sex offender with male victims vs. 87% classified correctly by the PPG (Abel, Huffman, Warberg, & Holland, 1998).

Viewing Time measure – Sexual interest in sadomasochism (VT – Sadomasochism).

Similar to the methodology described above, this VT task presented respondents with a hypothetical scenario (e.g., Suppose you are asked to evaluate the effectiveness of various models for a clothing catalogue that caters to all ages, from children to adults) and then ask them

to rate on a 5-point Likert scale how effective each person will be a catalogue model, from 1 (not at all successful) to 5 (very successful). Thirty stimuli, 20 target-related (i.e., involving sadomasochistic content) and 10 target-unrelated (i.e., involving landscape scenes), were selected for this task. The order in which the items appeared was randomized. All the images were acquired from microstock photography website istockphoto.com. Since this was a newly developed task, no validation data exists that is specific to it. Nevertheless, the usefulness of VT measures in capturing deviant sexual interest has already been demonstrated in forensic populations (see preceding section).

Outcome variables. Deviant sexual behaviour was assessed directly through the MASA – Behaviour index, and indirectly through two measures of proclivity, the Interest in Child Molestation Scale (ICMS; Gannon & O'Connor, 2011) and the Rape Proclivity Scale (RP; Bohner, Reinhard, Rutz, Sturm, & Effler, 1998). The psychometric properties of the MASA were covered in an earlier section.

#### Indirect measures.

Interest in Child Molestation Scale (ICMS; Gannon & O'Connor, 2011). The ICMS is thought to measure self-reported arousal toward and behavioural propensity toward engaging in child sexual abuse (Gannon & O'Connor, 2011). The instrument contains five detailed vignettes that describe a hypothetical instance of child sexual abuse. Three of the scenarios involve coercive but non-aggressive abuse (low-force scenarios) whereas the remaining two describe aggressive child sexual abuse (high-force scenarios). The respondents are asked to read each scenario and imagine themselves in the situation presented. They then have to answer three questions (In this situation, how sexually aroused would you be? In this situation, would you have done the same? In this situation, how much would you enjoy getting your way?) on a 7-

point Likert scale ranging from 1 (Not at all sexually aroused; Would definitely not have done the same; Would not enjoy it at all) to 7 (Very strongly sexually aroused; Would definitely have done the same; Would greatly enjoy it). A behavioural propensity score is obtained by adding the participant's ratings from questions 2 and 3 across all five scenarios, with higher scores suggesting a greater proclivity toward engaging in such behaviours. Whereas Gannon and O'Connor (2011) used only the second question to tally behavioural tendency scores, Bohner et al., (Bohner, Pina, Tendayi Viki, & Siebler, 2010) recommended the combination of questions 2 and 3 to yield an index of proclivity. Bohner et al.'s method (2010) was preferred because the index score would be relying on 10 items instead of five, thus increasing its reliability. Only the behavioral propensity subscale (ICMS Proclivity), composed of 10 times, was used in the current investigation.

The authors reported Cronbach alpha values of .86 and .93 for the low force and high force scenarios respectively. The test-retest values after a two-week interval are .76 for the low force scenarios and .50 for the high force scenarios.

Rape Proclivity Scale (RP; Bohner et al., 1998). Similar to the logic in ICMS, the RP presents the respondent with five detailed scenarios describing instances of date rape. After reading each scenario, participants answer three questions on a 1-7 Likert type scale (e.g., In this situation, how sexually aroused would you be? In this situation, would you have done the same? In this situation, how much would you enjoy getting your way?). An index of behavioural proclivity is calculated by averaging the responses to questions 2 and 3 across the five scenarios. Higher scores suggest greater behavioural propensity towards engaging in similar scenarios. Only the behavioral propensity subscale (RP Proclivity), composed of 10 times, was used in the current investigation.

Bohner et al. (2010) reported a Cronbach alpha value of .83 in their undergraduate sample. The validity of the measure is supported by correlations with men's self-report of previous sexual acts and men's self-predictions of engaging in sexual coercion in the future (Bohner et al., 2010).

**Moderator variables.** The moderator variables were assessed with the Barratt Impulsiveness Scale (BIS-11), Eysenck's Impulsiveness Questionnaire – Impulsiveness (Imp) and Venturesomeness (Vent) subscales (I<sub>7</sub>; Eysenck et al., 1985), the Narcissistic Personality Inventory – 16 items (NPI-16, Ames, Rose & Anderson, 2006), the Self-Report Psychopathy – Short Form (SRP-SF; Paulhus, Neumann & Hare, in press), the Multidimensional Anger Inventory (MAI; Siegel, 1986), and the RAPE and MOLEST scales (Bumby, 1996).

*Impulsivity.* The construct was assessed by the Barratt Impulsiveness Scale (BIS) and the Eysenck's Impulsivity Inventory (I<sub>7</sub>: Eysenck, Pearson, Easting, & Allsopp, 1985).

Barratt Impulsiveness Scale (BIS-11). The BIS is a 30-item self-report instrument designed to assess the personality construct of impulsivity. Specifically, it measures three components of impulsivity including attentional impulsiveness, defined as the inability to focus attention or concentrate, motor impulsiveness, defined as acting without thinking, and non-planning impulsiveness, defined as lack of futuring or forethought (Stanford et al., 2009). Respondents rate the frequency with which they have engaged in 30 behaviours on a scale from 1 (Rarely/never) to 4 (Almost Always/Always). An example of an item is "I do things without thinking". A total BIS score is computed by summing across all 30 items, with higher scores indicative of greater impulsiveness.

For BIS-11, Stanford et al. (2009) reported a Cronbach alpha value of .83 and test-retest reliability of .83 after a one-month interval. The validity of the BIS is reinforced by its robust

correlation with other measures of impulsivity including the Impulsivity subscale from the Eysenck Impulsivity Questionnaire (r = .63).

Eysenck's Impulsiveness Questionnaire – Impulsiveness (Imp) and Venturesomeness (Vent) subscales (I<sub>7</sub>; Eysenck et al., 1985). The I<sub>7</sub> is a 54-item self-report instrument designed to tap on two components of impulsivity: Impulsiveness (Imp) and Venturesomeness (Vent), The Imp subscale contains 19 close-ended questions to which the respondent answers Yes or No. Examples include: "Do you generally do and say things without stopping to think?" and "Do you usually work quickly, without bothering to check?" A subscale total score can be obtained by summing across all the items that have been answered in the same way as the scoring key provided by Eysenck et al. (1985). A higher score on the Imp subscale suggests a greater degree of impulsiveness. The Vent subscale contains 16 close-ended questions in a yes/no format. Examples of items include "Would you enjoy fast driving?" and "Would you enjoy parachute jumping?" A Vent total score can be computed by summing across all items that are answered in the same way as the scoring key found in Eysenck et al. (1985). A higher score on the Vent subscale indicates a greater degree of sensation seeking. In addition to Imp and Vent scales, the I<sub>7</sub> includes 19 items that tap on Empathy; this subscale was not used in the present study.

Eysenck et al., (1985) reported Cronbach alpha values of .84 (in males) and .83 (in females) for the Imp subscale, and .85 (in males) and .84 (in females) for the Vent subscale. Construct validity of the I<sub>7</sub> subscales has been extensively demonstrated through the correlation of Imp with Psychoticism and the correlation of Vent with Extraversion (Eysenck, 1993). As a result of this distinct pattern of correlations, Eysenck et al. (1985) argued that Imp and Vent measure different types of impulsivity. Therefore, the scores from the two subscales were used separately in the current study.

Narcissism: The Narcissistic Personality Inventory – 16 items (NPI-16; Ames et al., 2006) is derived from the well-known Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). Ames and colleagues (2006) selected the 16 paired statements based on (a) face validity – items chosen had to be representative of narcissism rather than related constructs and (b) coverage of domains – items chosen had to adequately cover the 4 factor-structure identified by Emmons (1984). The resulting 16 items can theoretically be divided into the following four factors: Exploitativeness/ Entitlement, Leadership/ Authority, Superiority/ Arrogance, and Selfabsorption/ Self-Admiration. The objective of Ames et al. (2006), however, was to provide a unidimensional scale that was representative of narcissism. Consequently, the NPI-16 in the present study provided a single overall score, with higher scores suggesting the presence of more narcissistic features.

Similar to its parent scale, NPI-16 is a forced-choice test whereby respondents are instructed to select one statement from each pair of items. Narcissism-consistent items are assigned a score of 1 and narcissism-inconsistent items are assigned a score of 0. The total score is computed by summing across all narcissism items. An example of an item is: "I find it easy to manipulate people vs. I don't like it when I find myself manipulating people". Ames et al. (2006) report a high correlation with the 40-item NPI (r = .90) and a test-retest correlation coefficient of .85 after a 5-week interval. Alpha values for NPI-16 range from .68 to .72 across four studies reported by the authors (Ames et al., 2006). The scale shows convergent validity through its correlation with self-esteem (r = .34), self-monitoring (r = .37), NEO-Openness (r = .24) and NEO-Extraversion (r = .36). Divergent validity was shown through a non-significant correlation with a measure of Belief in a just world (r = .04) and Cooperativeness (r = .05).

**Psychopathy**: The Self-Report Psychopathy – Short Form (SRP-SF; Paulhus et al., in

press) is a PCL-analogous instrument designed to measure psychopathic attributes in nonoffending and non-forensic samples. The short-form is derived from SRP III, a 64-item selfreport instrument that captures four facets of psychopathy: callous affect, interpersonal
manipulation, erratic lifestyle, and criminal tendencies (similar to the antisocial facet of PCL-R).
Similar to SRP III, the SRP-SF asks participants to rate the degree of their agreement with 29
items, ranging from 1 (*Disagree strongly*) to 5 (*Agree strongly*). Examples of items include "It's
fun to see how far you can push people before they get upset" and "Every now and then I carry a
weapon (knife or gun) for protection." An overall score can be obtained by first averaging the
items for each subscale and then taking the mean of the four subscales. It is also possible to
compute four separate facet scores by summing the subscale items, which is the approach used in
the current investigation. Higher scores are indicative of more extensive psychopathic attributes.

In a recent study using the same 29-item version as the one used in the current investigation, Seara-Cardoso and colleagues (Seara-Cardoso, Neumann, Roiser, McCrory, & Viding, 2012) reported Cronbach alpha values of .85 for the total SRP scale, .79 for Factor 1 (affective-interpersonal) composite, and .73 for Factor 2 (lifestyle-antisocial) composite. The full version of SRP-II has demonstrated a medium-size correlation with an earlier version of the PCL (r = .38). In addition, SRP-II measure is negatively related to State-Trait Anxiety (r = .30) and NEO-Agreeableness (r = .46) and positively related to the Narcissistic Personality Inventory (r = .62), Eysenck's P scale (r = .63), the Psychopathic Personality Inventory (r = .60), and Levenson Self-Report Psychopathy Scale (r = .53) (Williams, Paulhus, & Hare, 2007).

Anger. The construct was assessed with the Multidimensional Anger Inventory (MAI; Siegel, 1986). The MAI is a 38-item self-report inventory believed to capture several dimensions of anger including frequency, duration, magnitude, mode of expression, hostile outlook, and

range of anger-eliciting situations. It yields the following five subscales: Anger-arousal, Range of anger-eliciting situations (Anger Situations), Hostile outlook, Anger-in, and Anger-out. The instrument instructs participants to rate each statement on the basis of how well it describes them. All items are answered on a 5-point Likert type scale ranging from 1 (*Completely undescriptive of me*) to 5 (*Completely descriptive of me*). Examples of items include: "I get so angry, I feel like I might lose control" and "I get angry when I have to work with incompetent people". Scores for the separate subscales are computed by summing across the appropriate items. A total score was also calculated.

The internal consistency of MAI subscales ranges from .50 to .88 (Culhane & Morera, 2010), with the lowest alpha value found in the Anger-out subscale, which consists of only two items. The MAI has a test-retest reliability of .75 after a 3-4 week interval, and an overall internal consistency of .84 in a sample of college students (Siegel, 1986). Its concurrent validity is supported by correlations in the expected direction with other measures of anger including the Novaco Anger Scale and Provocation Inventory, the State-Trait Anger Expression Inventory (Culhane & Morera, 2010), and the Buss-Durkee Hostility Inventory (Siegel, 1986).

*Offense-supportive cognitions.* The construct was assessed with the RAPE scale and the MOLEST scale (Bumby, 1996).

RAPE scale (Bumby, 1996). The RAPE scale is a 36-item self-report inventory of cognitive distortions related to sexual offending. Respondents rate their agreement with each item on a 4-point Likert type scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). Examples of items include: "I believe that any woman can prevent herself from being raped if she really wants to" and "Many women have a secret desire to be forced into having sex". Responses are summed to yield an overall score, with higher scores suggesting more

justifications, minimizations, or rationalizations for the sexual assault of a woman.

Bumby (1996) reported a Cronbach alpha value of .97 and a test-retest reliability coefficient of .86 after a two-week interval. The RAPE scale showed adequate convergent validity with other measure of cognitive distortions such as the Cognitive Distortions/Immaturity (r = .33) and Justifications (r = .34) subscales from the Multiphasic Sex Inventory. The RAPE scale was unrelated to the Marlow-Crowne Social Desirability scores.

MOLEST scale (Bumby, 1996). The MOLEST scale is a 38-item self-report inventory of cognitive distortions related to sexual offending against children. Similar to the RAPE scale, respondents rate their agreement with each item on a 4-point Likert type scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). Examples of items include "I believe that sex with children can make the child feel closer to adults" and "Sometimes, touching a child sexually is a way to show love and affection." Responses are summed to yield an overall score, with higher scores suggesting more justifications, minimizations, or rationalizations for the sexual assault of children.

Bumby, (1996) reported a Cronbach alpha value of .97 and a test-retest reliability coefficient of .84 after a two-week interval. The MOLEST scale demonstrated adequate convergent validity with other measure of cognitive distortions such as the Abel Cognitions Scale (r = -.54), the Cognitive Distortions/Immaturity (r = .47) and the Lie Scale: Child Molest (r = -.51) subscales from the MSI (Bumby, 1996). Discriminative validity was demonstrated by a non-significant relationship between the MOLEST scale and the MCSDS.

Control variables. The control variables were assessed with the Balanced Inventory of Desirable Responding – Version 6 – Impression Management Scale (BIDR-6; Paulhus, 1991), a brief questionnaire on pornography use, and the Sexual Compulsivity Scale (SCS; Kalichman et

al., 1994).

The Balanced Inventory of Desirable Responding – Version 6 – Impression Management Scale (BIDR-6; Paulhus, 1991). The BIDR is a 40-item self-report instrument that measures an individual's socially desirable responding - the tendency to give overly positive self-descriptions that are likely to elicit approval from others (Paulhus, 1991). In taking the BIDR, participants are asked to rate each of the 40 items on a 7-point Likert scale ranging from 1 (not true) to 7 (very true). Examples of items include: "I never regret my decisions" and "I always obey laws, even if I'm unlikely to get caught." The full BIDR includes two constructs: a 20-item Self-Deceptive Enhancement (SDE) scale believed to capture a tendency to give honest but inflated self-reports, and a 20-item Impression Management (IM) Scale thought to measure instances of deliberately presenting oneself in more socially desirable terms. Coefficient alphas range from .75 to .86 for the IM scale, and .68 to .80 for the SDE scale (Paulhus, 1991). Test-retest correlations after a 5-week interval are .65 for IM and .69 for SDE.

Although the psychometric properties of both subscales are adequate, given the length of the full BIDR, the lack of a well-validated BIDR short form, and the number of instruments included in the test package, only the IM subscale was used to index socially desirable responding in the present study. The IM subscale correlates highly with MCSDR and a cluster of measures known as lie scales (Paulhus, 1991). Originally, Paulhus authorized both a continuous and a dichotomous scoring method for the BIDR. Stöber, Dette, and Musch (2002), however, advocate the use of continuous scores to achieve better psychometric properties. In line with their advice, a continuous overall IM score was computed by summing answers across items. Higher scores on the IM scale indicate greater response bias due to deliberate attempts at presenting oneself in a more favorable light.

Pornography Use Questionnaire. This construct was assessed by asking respondents questions about the type and frequency of pornography accessed within the past year, the type of pornographic material they looked at before age 13, and the types of pornographic material they accessed or were exposed to between the ages of 13 and 17. All the questionnaire items came from previous inventories (e.g., MASA).

Sexual Compulsivity Scale (SCS; Kalichman et al., 1994). The SCS is a widely used 10item instrument that assesses self-reported tendencies toward sexual preoccupation and
hypersexuality. Respondents rate each statement to the extent that it describes them from 1 (Not
at all like me) to 4 (Very much like me). An overall SCS score is computed by summing across
all 10 items, with higher scores suggesting a greater prevalence of sexually compulsive thoughts
and behaviours. Examples of items include: "My desires to have sex have disrupted my daily
life" and "I have to struggle to control my sexual thoughts and behaviours."

The scale authors have reported a Cronbach alpha value of .89, and test-retest correlation coefficient of .95 following a 2-week interval (Kalichman et al., 1994). The construct validity of the scale is strengthened by its positive correlation with the UCLA Loneliness Scale (r = .44), its negative association with measures of self-esteem (Rosenberg Self-Esteem Scale; r = -.32) and sexual control (Perceived Sexual Control Scale; r = -.61) (Kalichman et al., 1994).

### **Procedure**

General overview. The study was conducted entirely online. Participants were recruited through the Participant Pool at the University of Windsor, with the recruitment period extending from November 2012 to May 2013. The advertisement on the Participant Pool page informed potential participants that they would be asked to complete a series of questionnaires and tasks regarding awareness of, attitudes toward deviant sexual acts, and any possible history of this.

The questionnaire contained explicit language, obscene words, and sexually suggestive images and vignettes, so participants were warned that they might be surprised by the content (see Appendix C for the Consent Form and Participant Pool advertisement).

A few methods were employed to exclude participants at risk of being harmed by the scope of the present research. First, participants who had been victimized in the past or had previously been recipients of any unintended sexual advances, even if they did not recognize it as trauma at the time, were strongly advised against participation. Secondly, participants were informed that the survey contains explicit language and obscene words. The informed consent was clear and explicit in stating the nature of the study and the kind of stimuli expected, and included examples of the materials in the questionnaire package. Respondents were discouraged from participating if the kind of language or material was offensive, anxiety provoking, or likely to elicit trauma memories for them. Lastly, a list of resources was made available to participants online in case they preferred to talk to someone about any negative emotions arising from having partaken in this study.

Once participants signed up for the study, they immediately gained access to the study URL located on the Participant Pool advertisement. When participants clicked on the URL, they were directed to the study site and automatically assigned a randomly generated alphanumeric ID, which they used to go through the survey. The Consent Form was found on the first page of the survey and outlined the terms and purposes of the study, the benefits and potential harms, and their rights as participants. Those who consented to participate first answered a question about their biological sex. Depending on their answer, they were directed to either the male or the female version of the questionnaire. If the participant identified as male, he was randomly directed to either version A or B of the testing package. If the participant identified as female,

she was then randomly directed to either version C or D of the testing package.

Next, all four versions of the questionnaire asked respondents a number of demographic questions about their age, year in university, etc. This was followed by four reaction-timed tasks (two Implicit Association Tasks (IAT) and two Viewing Time tasks (VT)) and some paper-and-pencil type measures. The data from the implicit tasks and the survey data from Fluid Surveys were linked through the unique alphanumeric ID that was originally randomly assigned to that participant at the beginning of the survey.

At any point during the survey, participants could refuse further participation by clicking on the 'Exit' button at the bottom of each survey page. When a participant prematurely left or, alternatively, completed the survey, they were automatically directed to a separate page where they received post-study information, a list of community resources, and obtained their bonus credit(s). The percentage of questioned answered was automatically passed on to this final page. In order for the researcher to accurately allocate bonus credit(s), participants provided their full name, University of Windsor email address, biological sex, and University of Windsor student number. Neither the identifying information, nor the unique alphanumeric ID, was connected to the survey results. This procedure ensured anonymity. Confidentiality of survey results was protected with several security technologies including firewalls and data encryption, and the information was securely stored on severs located in Canada.

The entire study took approximately 120 minutes to complete. The study could be completed over as many sessions as desired over the course of a semester. Participants were encouraged to take as many breaks as needed but had to save their answers before leaving the site by clicking on the 'Save and continue later' button located at the bottom of every survey page. The only exception to this was the implicit measures. Given the time-sensitive nature of

the tasks, participants could not quit an Implicit Association Task or a Viewing Time task and then return to it later.

Novel procedures. Implicit measurement methods have certain features that render them less vulnerable to impression management bias. Namely, implicit tasks "avoid requiring introspective access, decrease the mental control available to produce the response, reduce the role of conscious intention, and reduce the role of self-reflective, deliberative processes" (Nosek, Greenwald, & Banaji, 2007, p. 267).

IAT. The present study closely follows the standard IAT methodology outlined by Greenwald et al., (2003). The IAT task began by instructing the participants to classify items that appeared at the centre of the screen, as rapidly as possible, into one of two categories that were visible at the top of the screen. He/she was asked to use the E key to classify items as belonging to the category on the left, and the I key to classify item as belonging to the category on the right. The IAT consisted of seven blocks, some of which were practice trials to allow the participant to familiarize himself/herself with the task. The critical blocks, 4 and 7, involved sorting of word stimuli into four categories using the E and I keys. Sorting should be faster and more accurate when two concepts (i.e., categories) that share a response key have a stronger association than two concepts with a weaker association.

The two IAT tasks were hosted on the University of Windsor servers. They were built in HTML code that was manipulated with JavaScript. Once the participant clicked on the IAT link embedded in the online survey, a new window popped up with the IAT instructions. The contents of the IAT temporarily loaded on the respondents' computer, much like any website would, and the JavaScript code controlled the showing of the stimuli, the layout of the screen, the collection of user input, and the sending of the data back to the server. While the participant

was going through the task, there was no communication between the server hosting the task and the participant's computer, meaning that Internet speed did not interfere with the latencies. The accuracy of latencies, however, did depend on the type of browser and operating system used. Popular browsers provide accurate measurement to within a couple of milliseconds. Millisecond precision, however, could still be affected by a computer's processing speed, with Mac operating systems being slightly more accurate than Windows-based systems (16.7ms error window for Mac and 50-60ms error window for PCs; Nosek et al., 2002). Nosek et al., (2003) argued that the effect of processing speed is negligible in light of the strong effect sizes elicited by the IAT and the error reduction achieved by averaging data across trials. Despite some limitations, such as the inability to control a user's environment, Web-IAT tasks have been used by Greenwald and his colleagues (Greenwald et al., 2003; Nosek, Banaji, & Greenwald, 2002; Nosek, Greenwald, & Banaji, 2005) to collect large amounts of IAT data online.

*VT.* The two VT task were also made available online. Similar to the IAT tasks, the VT task pages contained HTML code. JavaScript was used to control the display of stimuli, screen specifications, and data collection. Once the participant clicked on the VT link embedded in the online survey, the webpage containing the task loaded on his/her computer. Since JavaScript ran locally to control the logic of the task and the display of stimuli, Internet speed did not affect the accuracy with which reaction time is measured. As discussed earlier, there was a small degree of error in Web-based reaction time tasks because of the differences in computers processing speed and browsers. Similar to the IAT, it has been argued that differences in computers processing speed during the VT tasks are negligible, their influence largely disappearing after averaging across trials.

#### **RESULTS**

# **Data Analysis**

The original dataset consisted of 250 male and 152 female participants. As the study was conducted entirely online, it was possible that some participants rushed through the survey. Upon inspection, six surveys in the male dataset and six surveys in the female dataset were completed in less than 30 minutes. For the six male participants under review, completion times ranged from 25 to 30 minutes, with a gradual increase in time-to-completion in the next few cases. In contrast to this gradual increase, two of the six female surveys stood out because they were completed in 17 and 18 minutes respectively. After those two cases, the next fastest survey was completed in approximately 25 minutes. In view of the pronounced difference between these suspicious cases and the rest of the female dataset, both surveys were discarded, as it seemed highly likely that the surveys had been rushed and may be lacking in validity.

Prior to conducting any analyses, the dataset was inspected for missing values. In the female dataset, four cases had more than 10% of values missing. Specifically, those four cases had somewhere between 12.1% and 24.7% of values missing. Further review of these potentially problematic cases revealed that two of them did not contain any answers on one of the outcome variables. In addition, given the large percentage of missing values in these same two cases (15.8% and 24.7% respectively), imputation was not deemed an adequate solution. As such, the two cases in question were deleted, leaving the female dataset with 148 surveys. No one variable emerged as particularly problematic in terms of missing values; the most values missing were 4.6% for one variable. For the remaining 148 cases in the female dataset, Little's Missing Completely At Random (MCAR) test was not significant ( $\chi^2 = 317.507$ , df = 33395, p = 1.000), suggesting that the data were missing completely at random.

In the male dataset, only five cases had more than 10% missing values. In those five

cases, the percentage of missing cases ranged from 16.4% to 69.8%. As with the females, the large percentage of missing values among the five cases would have made data imputation an inappropriate solution. Moreover, the five cases were missing values on outcome variables of interest. As a result, the five cases were deleted, leaving the male dataset with 245 cases. No particular variable emerged as problematic; the highest percentage of values missing for a single variable was 3.2%. With 245 cases in the male sample, the Little MCAR test was not significant ( $\chi^2 = 16687.728$ , df = 60875, p = 1.000). As with the female sample, the nonsignificant Little MCAR test indicated that the data were missing completely at random.

Regarding data imputation, Expectation Maximization and Multiple Imputation are both widely accepted solutions to replacing missing values. Although the SPSS routine for Multiple Imputation (MI) is preferred to the Expectation Maximization (EM) technique in light of the superior way in which the former deals with error, the MI solution, unlike the EM technique, did not allow for bootstrapping. As such, Expectation Maximization was used to replace missing values.

Following this initial review of the dataset, scale and subscales totals were computed next. The specific procedures for calculating the scores of different inventories have already been described in the Method section. Upon noticing the high rates of endorsement of certain pedophilia-related fantasy items on the MASA (e.g., item 6, 7, 25, 30, 35, and 51), it was clear that most participants had not detected the different ages implied by the words "woman," "girl," "man," and "boy." These items were therefore dropped from the calculation of the MASA indices. In addition, item 8 from the MASA – Behaviour Index was dropped from the female dataset because wearing male clothing is a common occurrence for females in today's society. The Cronbach alpha values for the female dataset were .96 for the modified MASA – Fantasy

Index (46 items) and .91 for the MASA – Behaviour Index (31 items). For the males, the Cronbach values were .95 for the modified MASA – Fantasy Index (47 items) and .90 for the MASA – Behaviour Index (32 items). See Appendix G for a complete list of the modified MASA items.

# **Reformulating the Variables**

Concerns regarding accumulation of Type I error led to the use of a single regression analysis in lieu of several separate regressions. The large number of predictor and moderator variables, however, caused problems of tolerance when the single regression analysis was conducted. Therefore, there was a need to reduce the number of variables while still adequately representing the moderators hypothesized. Principal Component Analysis (PCA) is a psychometrically sound procedure for reducing numerous variables into fewer observable components that summarize an optimal amount of their variance (Stevens, 2009). As such, PCA was used to reformulate the variables of interest.

**PCA for the explicit measures.** Data cleaning for the present investigation proceeded in a two-step fashion. The first step involved checking the tenability of the PCA assumptions, and then conducting a PCA on the resulting dataset. In the second step, assumption checking was done in the context of a regression analysis, which was the primary focus of the project.

The following assumptions are crucial to the reliability of a PCA analysis: normality, no multivariate outliers or influential observations, adequate sample size, and the presence of an initial relationship among the variables to be factored.

Although deviations from normality are not necessarily problematic, normality is preferable because it enhances the factor solution. When normality indices were inspected, all the skewness and kurtosis values for the 12 variables of interest were within an acceptable range

(+/-2 for skewness and +/-3 for kurtosis). The squared Mahalanobis distance statistic was computed to determine whether there were any multivariate outliers that might impact the solution. Two cases had a value greater than the cutoff of 32.91 (df = 12, p = .001). Since multivariate outliers may alter intercorrelations, the two cases were deleted, leaving the male sample at 243. A second review of the Mahalanobis statistics on a sample of 243 did not point to any problematic cases.

As a rule of thumb, an adequate sample size in PCA consists of at least 10-15 cases per variable (Field, 2009). Despite the heuristic value of this general guideline, sample size adequacy is dependent on the relationship between the variables, with higher communalities (i.e., common variance) requiring fewer participants to achieve the same level of sensitivity. Given the magnitude of correlations between the 12 variables of interest (see Table 4), as well as the recommended cases-per-variable ratio, a sample size of 243 was deemed adequate. Moreover, the Kaiser-Meyer Olkin (KMO) measure of sampling adequacy reached a value of .787, suggesting "good" sample size (Kaiser, 1974, as cited in Field, 2009).

As can be seen from Table 4, the magnitude of intercorrelations satisfied the assumption of a pre-existing relationship between the variables of interest. Although there were some high correlations (highest Pearson r was .73 between SRP Interpersonal and SRP Affective), multicollinearity is not a problem in PCA (Field, 2009).

Factor extraction and rotation method. The decision regarding the number of components to extract was based on multiple criteria including the Kaiser-Guttman rule, the screen plot, a parallel analysis using randomized data, as well as the conceptual necessity of accurately representing the hypothesized moderator variables. Whereas the Kaiser-Guttman rule and the scree plot suggested a four-component solution, the parallel analysis recommended the

extraction of three components.

Although a three-component solution was briefly pursued, a four-component solution was chosen on the grounds that a) over extraction is preferred to under extraction, b) the three-factor solution was more difficult to interpret. It yielded a hyperplane count of 33%, which was substantially lower than the hyperplane counts obtained from the four-component solutions outlined above, and c) the four-component solution was a more accurate representation of the four hypothesized moderators.

In line with PCA, a principal component extraction method was used to extract the four components suggested by the Kaiser criterion and the scree plot. The four extracted components accounted for 69.83% of the variance. Given the intercorrelations between the variables, an oblique rotation, promax, was chosen. Although separate promax solutions with a power of 2, 2.5 and 3 were pursued, the resulting pattern matrices did not seem to differ substantially. Across all rotations, two variables (SRP Interpersonal and SRP Affective) consistently cross-loaded on two components. Oblimin extraction with a delta value of 0 and -2 did not help in clarifying the two cross-loading variables.

Hyperplane counts, a measure of simple structure suggested by Thurstone (1947), were computed next in order to ascertain whether any one of five solutions pursued (three promax and two oblimin solutions) were superior at clarifying the four components. The hyperplane count for the five solutions ranged from 67% (promax at a power of 2) to 75% (oblimin at delta = -2). Given that the components extracted would be used in a regression analysis, and that multicollinearity is a concern for regression, the component correlation matrix was also inspected for any correlations that would be problematic. Taking into account the hyperplanes, as well as the component correlations, the two best solutions were oblimin at -2 and promax at 2.5.

The promax solution at a power of 2.5 was ultimately chosen because this rotation offered a slight interpretation advantage as compared to the oblimin (-2) solution (i.e., highest loading variables on each of the four components were positive). The pattern matrix and the structure matrix for the four-component solution with a promax rotation (power of 2.5) can be found in Tables 5 and 6 respectively. The component correlation matrix is displayed in Table 7. Due to its frequent use, the regression method was chosen to obtain component scores.

Renaming the four components. As the first component was primarily defined by high scores on BIS, I<sub>7</sub> Impulsivity, SRP Lifestyle, and SRP Antisocial, it was labeled "Impulsivity." The second component was defined by high scores on MOLEST Total and RAPE Total, and to a lesser extent, by individuals scoring high on SRP Interpersonal and SRP Affective. As such, this dimension was labeled "Offense-Supportive Cognitions." The third component was primarily defined by individuals scoring high on the two anger subscales: Anger Situations and Hostile Outlook. Therefore, this dimension was labeled "Anger." The final component was defined by high scorers of NPI-16 and I<sub>7</sub> Venturesomeness, and to a lesser extent, by individuals scoring high on SRP Interpersonal and SRP Affective. Given the contribution of the two highest loading scales, this component was labeled "Surgent Narcissism."

To summarize, the four components extracted to represent the hypothesized moderator variables were labeled as follows: Impulsivity, Offense-Supportive Cognitions, Anger, and Surgent Narcissism.

## **PCA for the Implicit Measures**

Similar to the PCA approach for the explicit measures, the implicit measures were also subjected to a PCA analysis in order to determine an optimal number of components that were most representative of the implicit constructs under investigation. In order to ensure the

replication and/or stability of results obtained in the current study, the following PCA-related assumptions were checked: univariate and multivariate normality, adequate sample size, and a pre-existing relationship between the variables included in the PCA.

The validated procedure for dealing with IAT data involves the deletion of trials in excess of 10,000 milliseconds and the elimination of cases where over 10% of the trials have lasted less than 300 milliseconds. The original CSA-IAT dataset contained data from 218 male participants and the original RE-IAT dataset contained data from 204 male participants. As a result of following the validated data cleaning procedure, 16 cases from the CSA-IAT and 25 cases from the RE-IAT male data would have to be deleted. Since this strategy required the deletion of a significant amount of data, a more liberal approach was taken; cases with over 50% of trials under 300 milliseconds were discarded. By following this more lenient approach, six CSA-IAT cases and 15 RE-IAT cases were deleted. Post-deletion, the skewness and kurtosis values for CSA-IAT were .69 and 1.75 respectively. For the RE-IAT, the task had a skewness of 1.23 and a kurtosis of 2.12. Since, in addition to the aforementioned deletions, there were also 25 male participants with self-report but no CSA-IAT data, and 39 male participants with self-report but no RE-IAT data, case-wise deletion was preferred to imputation.

The original VT-Sadomasochism task contained data from 220 male participants. The original VT- Pedophilia task contained data from 220 male participants. Unlike the IAT, methods for dealing with non-normality and outliers in VT data have yet to be validated. A widely recommended approach is to eliminate response times beyond a certain cut-off score (e.g., using the median plus one or two standard deviations; Gress & Laws, 2009). As this procedure pointed to a substantial amount of cases that were candidates for deletion, a more liberal approach was taken where the cutoff value was calculated by taking the median plus three

standard deviations. This cutoff value suggested fewer problematic cases; two from the "Woman Dom" and six from the "Woman Sub" task. This was still, however, a considerable amount of cases. A square root transformation was applied, but this only helped with the normality of the "Woman Sub" category (post-transformation skewness = 1.03; kurtosis = 2.29), but not the "Woman Dom" category (post-transformation skewness above 35). Since a truncation approach (where the problematic value was replaced with a value equivalent to 2.5 and then 3 SD above the median) was unsuccessful in reducing the "Woman Dom" kurtosis, the two problematic cases were deleted, resulting in more acceptable normality indices (skewness = 1.33, kurtosis = 3.38). A square root transformation of the "Woman Dom" category further improved the distribution (skewness = .38, kurtosis = .94).

Next, the squared Mahalanobis statistic pointed to four potentially problematic cases that slightly exceeded the cutoff value of 22.49 (df = 6, p < .001). The PCA was conducted both with and without the four cases, and, since the solutions produced were remarkably similar, the four cases were kept.

Based on the 10-15 cases per variable recommendation, as well as the intercorrelations presented in Table 8, sample size was generally adequate for the six variables. In addition, the KMO statistic at .74 suggested "good" sample size.

Lastly, the matrix of intercorrelations among the implicit variables is displayed in Table 8. There were some clear intercorrelations between the VT measures, with the highest Pearson r found among the "Sub" and "Dom" subscales of the VT-Sadomasochism task. The two IAT measures correlated to a lesser extent at r = .16. Taken together, the magnitude of the intercorrelations suggested some pre-existing relationships between the implicit variables, although these relationships were mostly restricted to method-related similarities (i.e., use of

images as stimuli). In light of this pattern, it was debatable whether PCA necessarily offered any advantages to averaging the subscales within a task and using the four implicit tasks as-is.

Although the advances to conducting a PCA on the implicit measures were not substantial, a PCA was run in order to ensure a more accurate weighting of the four constructs of interest.

Factor extraction and rotation method. A principal component extraction with a promax rotation (power of 2) based on the Kaiser-Guttman rule and the scree plot produced two components that were highly reflective of the previously observed intercorrelation pattern.

Namely, all the VT tasks loaded on one component and all the IAT tasks loaded on the other component. Although this extraction was statistically sound, it did not adequately represent the constructs measured by the four implicit tasks. As such, separate solutions with a promax power of 2 and 3 were pursued with the forced extraction of three and four components. Ultimately, the promax solution at a power of 2 with a forced extraction of four components was chosen because a) the emerging components were more easily interpretable and more consistent with the constructs they were meant to capture, b) over extraction is widely preferred to under extraction. In view of over extraction, hyperplane counts could not be calculated. This procedure was hardly necessarily, however, given that the intercorrelation patterns observed earlier (see Table 8) made the extracted solution relatively clear.

The four components extracted accounted for 86.67% of the variance. The pattern and structure matrices for the four-component promax solution (power of 2) are displayed in Tables 9 and 10 respectively. A matrix of component intercorrelations can be found in Table 11. Due to its frequent usage, the regression method was chosen in order to obtain component scores.

**Renaming the four components.** Since the first component was primarily defined by high scores on the VT – Sadomasochism task, this component was labeled "Interest in

Sadomasochistic Images." In view of the high loadings of the "Child Female" and "Child Male" subscales, the second component was labeled "Interest in Pictures of Children." The third component was predominantly defined by high scores on the RE-IAT task. As such, this component can best be conceptualized as "Positive Evaluation of Rape." Finally, since the last component was almost exclusively defined by high scores on the CSA-IAT task, this component was labeled "Interest in Pedophilia."

To summarize, the four components extracted to represent the four implicit variables were as follows: Interest in Sadomasochistic Images, Interest in Pictures of Children, Positive Evaluation of Rape, and Interest in Pedophilia. Although having components with one or two loadings is highly unusual and generally recommended against, these components were nonetheless retained because they were consistent with the constructs assessed and closely resembled the intercorrelation patterns in Table 8.

# Main Analysis: Regression

In order to test the hypothesis that the fantasy-behaviour relationship is moderated by certain theory- and empirically-driven risk factors, three separate moderated multiple regression analysis were planned. The first analysis looked specifically at the fantasy-behaviour relationship as assessed by the MASA indices, whereas the other two analyses examined the fantasy-proclivity relationship as it pertained to a behavioural tendency to rape and a behavioural tendency to molest children.

Prior to conducting the main regression analyses, the following assumptions were briefly reviewed: adequate sample size, independence of errors, absence of outliers, absence of multicollinearity or singularity, normality, linearity, and homoscedasticity of errors.

As a rule of thumb, Green (1991) recommended a minimum sample size of 104 + k for

77

testing individual predictors in multiple regression, where k is equal to the number of variables. Since the number of cases in the planned regression exceeded Green's recommendation of at least 116 participants (104 + 8 components + DSF + 3 control variables), the sample size was deemed adequate.

The assumption of independence of errors was subsequently assessed. In line with Glass and Hopkins' (1984) position, the current investigation did not involve any interaction among participants, such as group counseling or discussion method. Since, based on our methodology, there was no reason to suspect that the residuals were correlated or otherwise dependent on one another, we argue that the independence of errors assumption is tenable.

In terms of univariate normality and outliers, the majority of skewness and kurtosis values did not reflect severe or problematic departures from normality (skewness values between +/-2, all kurtosis values between +/-8; Finney & DiStefano, 2006). Not surprisingly given the nature of the questions, the MASA Behaviour Index had problematic skewness and kurtosis values (skewness = 5.01; kurtosis = 32.27). A square root transformation brought the normality indices closer to acceptable limits (skewness = 1.30; kurtosis = 2.76). Similarly, the ICMS Proclivity subscale had an initial skew of 2.69 and an initial kurtosis of 7.60. A square root transformation of said variable improved the normality indices (post-transformation skewness = 2.34; post-transformation kurtosis = 5.32).

An inspection of the squared Mahalanobis distance statistic pointed to one case with a chi-square value close to 55, which far exceeded the recommended cut off of 32.91 (df = 12, p < .001). When said case was dropped and the Mahalanobis statistic was checked again, no other multivariate outliers were identified.

The presence of outliers on Y was evaluated through standardized residuals. With the

exception of one case whose standardized residual was close to 6, all the other residuals were between +/-3 SD. This same case also had a worrisome Cook's d statistic of .66. Being a potential problem on more than one assumption, the case in question was discarded from the dataset, leaving the sample at 241.

Based on the Cook's d statistic, there were no influential outliers in the sample. As recommended, all variance inflation factors (VIF) were less than 10, and all Tolerance statistics were greater than .1. In addition, there were no correlations approaching a Pearson r value of |0.90| (Tabachnik & Fidell, 2007), suggesting no multicollinearity or singularity concerns. The P-P plots across the three multiple regression analyses uncovered very slight deviation from normality. Similarly, the histograms looked mostly normally distributed.

When the residual scatter plot for MASA – Behaviour Index was consulted in order to determine the extent of linearity and homoscedasticity of errors, the result was a random scatter consistent with homoscedasticity. In contrast, the residual scatter plots for the two proclivity subscales, RP Proclivity and ICMS Proclivity, were a little more funnel-like in shape, suggesting some degree of heteroscedasticity. As a way of managing heteroscedasticity concerns, bootstrapping will be used for all three multiple regression analyses.

Given the missing data on the implicit tasks, descriptive statistics, including means, medians, and standard deviations, were calculated on a dataset of 175 males (see Table 12).

Regression Analysis for the Fantasy-Behaviour Relationship. A moderated multiple regression analysis was conducted to examine the role of Impulsivity, Anger, Offense-Supportive Cognitions, and Surgent Narcissism in the fantasy-behaviour relationship. For this analysis, the following three confounds were entered in block one: Balanced Inventory of Desirable Responding – Impression Management Scale, Pornography Use, and Sexual

79

Compulsivity Scale. In block two, the MASA – Fantasy Index, the four component predictors, as well as the four component moderators, were entered simultaneously. Block three saw the inclusion of 20 interaction terms. All variables were centered, as per Cohen et al.'s recommendation (2003).

The final model explained approximately 65% of the variance in the square root transformed MASA – Behaviour Index (see Table 13). Cumulatively, the interaction terms entered in the third block significantly improved the prediction of the MASA – Behaviour Index  $[\Delta R^2 = .096, F\ change\ (20, 142) = 1.95, p = .013]$ . Several variables emerged as significant predictors of the outcome, including the MASA – Fantasy Index ( $\beta = .47$ ), Interest in Pedophilia ( $\beta = -.13$ ), and Offense-Supportive Cognitions ( $\beta = .20$ ). In addition, the following interaction terms substantially contributed to the prediction of deviant sexual behaviours: MASA – Fantasy Index x Anger ( $\beta = -.16$ ), Positive Evaluation of Rape x Anger ( $\beta = .14$ ), and Interest in Pedophilia x Impulsivity ( $\beta = -.12$ ). Although statistically significant, the bootstrapped confidence intervals for these three interaction terms included zero, suggesting that the beta values obtained may be unstable and/or unlikely to replicate in other samples. Even so, the significant interaction terms were further probed using simple slope analysis.

Post hoc probing of the MASA – Fantasy Index x Anger interaction (see Figure 1) revealed that the slopes were significantly different from zero at low (t = 6.60, p < .05, 95% CI: .03, .05), medium (t = 6.96, p < .05, 95% CI: .02, .04), and high levels of Anger (t = 3.64, 95% CI: .01, .03). Such results suggest that there is a positive relation between fantasies and behaviour at all levels of Anger. This positive association suggests that males with low-to-high levels of anger were more susceptible to translating DSF into aberrant sexual acts. There was a tendency for higher levels of anger to interfere with the translation of fantasy into behaviour.

When probing the significant interaction between Positive Rape Evaluation and Anger (see Figure 2), the moderation was found to occur only at high levels of Anger (t = 2.24, 95% CI: .03, .51). While the positive association between a positive evaluation of rape and behaviour emerged at high levels of Anger, the two variables were essentially unrelated at low and medium levels of Anger. Such a finding suggests that a positive evaluation of rape is more likely to translate into behaviour for those individuals experiencing high levels of anger.

A simple slope analysis of the Interest in Pedophilia x Anger interaction (see Figure 3) revealed that the slopes were significantly different from zero at medium (t = -2.21, 95% CI: -.35, -.02) and high (t = -2.88, 95% CI: -.61, -.11), but not low levels of Anger. As such, the moderation of the pedophilic interest-behaviour relationship seems to occur only at moderate to high levels of Anger. In fact, there is a negative association between pedophilic interest and behaviours at moderate to high levels of Anger, suggesting that pedophilic interest is less likely to be translated into deviant sexual behaviour in moderately to highly angry individuals.

Regression Analysis for the Fantasy-Rape Proclivity Relationship. A second moderated multiple regression analysis was conducted to examine the role of Impulsivity, Anger, Offense-Supportive Cognitions, and Surgent Narcissism in the fantasy-rape proclivity relationship. The order of variable entry was the same order as the one described in the above section.

The final model explained approximately 47% of the variance in the Rape Proclivity subscale (see Table 14). The interaction terms entered in the third block did not significantly improve on the prediction of Rape Proclivity [ $\Delta R^2 = .062$ , F change (20, 142) = .83, p = .669]. Only two variables, Offense-Supportive Cognitions ( $\beta$  = .56) and Interest in Pedophilia x Impulsivity ( $\beta$  = .15), emerged as statistically significant predictors of the outcome.

81

Post hoc probing of the Interest in Pedophilia x Impulsivity interaction (see Figure 4) demonstrated that none of the simple slopes was significantly different from zero at low (t = -1.56, p > .05, 95% CI: -4.15, .05), medium (t = -.40, p > .05, 95% CI: -1.87, 1.24), or high levels of Impulsivity (t = 1.09, p > .05, 95% CI: -.97, 3.37). Although not statistically significant, there was a tendency for highly impulsive individuals to be more likely to act on their pedophilic interests.

Regression Analysis for the Fantasy-Child Molestation Proclivity Relationship. The third and final moderated multiple regression analysis was conducted to assess the role of Impulsivity, Anger, Offense-Supportive Cognitions, and Surgent Narcissism in the fantasy-child molestation proclivity relationship. The order of variable entry followed the one already outlined in previous section.

The final model explained approximately 52% of the variance in the square root transformed ICSM Proclivity subscale (see Table 15). Of note, the addition of the interaction terms in the third block significantly improved the prediction of ICSM Proclivity [ $\Delta R^2 = .128$ , F change (20, 142) = 1.88, p = .018]. As was the case with the two previous regression analyses, the presence of Offense-Supportive Cognitions was a significant predictor of the outcome ( $\beta = .53$ ). In addition to Offense-Supportive cognitions, three interaction terms emerged as significant predictors of the outcome: MASA – Fantasy Index x Surgent Narcissism ( $\beta = .18$ ), Interest in Sadomasochism x Impulsivity ( $\beta = .27$ ), and Interest in Pedophilia x Offense-supportive cognitions ( $\beta = .18$ ). While the bootstrapped confidence intervals for these three interactions do include zero, suggesting potential instability, the moderations are worth exploring further.

A simple slope analysis of the interaction between MASA – Fantasy Index x Surgent Narcissism (see Figure 5) indicated that the slopes were significantly different from zero at low

82

(t = 2.66, p < .05, 95% CI: .003, .02), but not medium (t = 1.66, 95% CI: -.01, .01) or high levels of Surgent Narcissism (t = -.27, 95% CI: -.01, .01). In other words, a positive association between fantasy and child molestation proclivity emerged only at low levels of Surgent Narcissism. Such a result suggested that males low in Surgent Narcissism were the most likely to convert fantasies into a proclivity towards molesting children.

Post hoc probing of the Interest in Sadomasochism x Impulsivity interaction (see Figure 6) revealed that the slopes were significantly different from zero only at high levels (t = 2.45, p < .05, 95% CI: .04, .42), but not medium (t = .59, 95% CI: -.09, .16) or low levels of Impulsivity (t = -1.65, 95% CI: -.34, .03). The positive association between Interest in Sadomasochism and proclivity towards child molestation was only evident at high levels of impulsivity. It seems that highly impulsive individuals are most likely to translate an interest in sadism and/or masochism into a tendency to molest children.

Finally, the interaction term composed of Interest in Pedophilia and Offense-supportive Cognitions was further probed through a simple slope analysis (see Figure 7). Results demonstrated that the slopes were significantly different from zero at low (t = -2.17, p < .05, 95% CI: -.36, -.02) but not medium (t = -.89, 95% CI: -.16, .06) or high levels of Offense-supportive Cognitions (t = 1.06, 95% CI: -.08, .27). Such a finding suggests that an interest in pedophilia is less likely to translate into child molestation when an individual holds less offense-supportive cognition. Although not statistically significant, there was a trend for highly cognitively distorted individuals to be more susceptible to converting an interest in pedophilia into a tendency to molest children.

## **Summary of Findings**

With regard to the first hypothesis, it was found that highly impulsive males endorsing an

interest in sadism/masochism showed greater behavioral proclivity towards molesting children than those scoring in the low to moderate impulsivity range. Concerning the second hypothesis, results suggested that low scorers on Surgent Narcissism were more likely than high or moderate scorers to convert deviant fantasies into a proclivity towards molesting children.

As for the third hypothesis, it was found that the influence of DSF on deviant sexual behaviours was stronger for males exhibiting low to moderate levels of anger, as compared to highly angry males. Endorsing a positive evaluation of rape had the greatest impact on aberrant sexual acts for those scoring high in anger, relative to individuals exhibiting low to moderate levels of anger. Lastly, showing an interest in pedophilia lowered the likelihood of engaging in deviant sexual acts only for individuals experiencing high to moderate levels of anger.

Finally, possessing less offense-supportive cognitions acted as a buffer for those with an interest in pedophilia. In other words, endorsing less molestation-supportive cognition corresponded to a decreased likelihood of pedophilic interest translating into a proclivity to molest children. Although not statistically significant, there was also a tendency for highly cognitively distorted individuals to be more susceptible to translating their pedophilic interest into a behavioural tendency to molest children.

#### DISCUSSION

The present investigation sought to explore the extent to which the fantasy – behaviour relationship was moderated by four theory-driven risk factors: impulsivity, psychopathynarcissism, anger, and offense-supportive cognitions. Specifically, it was hypothesized that deviant sexual fantasies (DSF) would be more likely to translate into aberrant sexual behaviours in males who were highly impulsive, endorse more psychopathic and narcissistic traits, score high on trait anger, and endorse an elevated degree of offense-supportive cognitions.

## Hypothesis 1 & 2

As a by-product of the data analysis approach undertaken for the present investigation,

Factor 1 Psychopathy loaded alongside Narcissism and Venturesomeness on a component

labeled "Surgent Narcissism," whereas Factor 2 Psychopathy predictably loaded on the

"Impulsivity" component. Results will first be discussed for "Impulsivity." The discussion will

then turn to the effect of "Surgent Narcissism" on the fantasy-behaviour relationship.

Based on prior work on antisociality, Factor 2 Psychopathy (PCL-R; Hare, 2003), and their relationship to sexual offending and sexual deviance (Hanson & Morton-Bourgon, 2005), it was hypothesized that the influence of deviant fantasies on deviant sexual behaviours would be strongest for individuals scoring high in impulsivity. Stated otherwise, highly impulsive males were expected to be most susceptible to translating fantasies into acts. This hypothesis was investigated at two levels: a more general behaviour level and a more specific rape- and molestation- proclivity level.

Overall, we found limited support for our hypothesis. Contrary to our prediction, highly impulsive males were no more likely than less impulsive males to turn fantasies into deviant sexual behaviours. Furthermore, impulsivity did not significantly predict the commission of aberrant sexual acts. Although discrepant with previously reviewed studies (i.e., Hanson & Morton-Bourgon, 2005; Serin et al., 2001), the lack of findings in the present study may be due to our decision to use a combined index of behaviours, without distinguishing between types of deviant sexual behaviours. When a more specific level of analysis was undertaken, however, the fantasy-molestation link was not conditional upon impulsivity. Consistent with Porter et al.'s findings of comparatively lower Factor 2 Psychopathy scores among child molesters (2000), there was no evidence that highly impulsive males were more susceptible to converting fantasies

into an increased tendency to molest children. This conclusion is also highly congruent with self-reported motivation to offend, with child offenders attributing their offending to sexual gratification, negative affect, and need for intimacy, but not impulsivity (Mann & Hollin, 2007). Alternatively, our failure to detect a moderating effect for impulsivity may be due to shared method variance as both the predictor and the outcome were assessed through self-report.

At a more specific level of analysis, whether an interest in sadomasochism corresponded to an elevated proclivity to molest children was conditional upon an individual's impulsivity. Although post-hoc probing of this interaction did not reach statistical significance, the pattern of the graph suggested that highly impulsive males with an interest in sadomasochism were more likely to have elevated molestation proclivity scores, relative to males scoring in the low-to-moderate impulsivity range.

Similar to the results obtained in the fantasy-general behaviour relationship, the fantasy-rape proclivity link was not moderated by impulsivity. It can therefore be concluded that highly impulsive males were no more likely than low-to-moderate impulsivity scorers to translate DSF into an increased likelihood of committing rape. Although the author is not aware of any studies that have specifically tested this hypothesis, prior work done on Factor 2 psychopathy indicated a link between sexual recidivism and antisociality (Hanson & Morton-Bourgon, 2005). The discrepant findings may be due to the different constructs assessed (rape proclivity vs. recidivism) and/or the nature of the hypothesis (i.e., moderation vs. regression). As stated earlier, the present set of findings concerning impulsivity may also be due to shared method variance.

Taken together, these findings suggest that impulsivity has limited usage in identifying individuals prone to acting on their fantasies. It was only at the more specific level of analysis that high impulsivity seemed to be a significant moderator of the relationship between

sadomasochism and molestation proclivity. It is possible that the comorbid nature of paraphilias explains the conditional relationship between sadomasochism and molestation proclivity. A related explanation rests in the *paraphilic hypersexuality* hypothesis advanced by Cantor et al., (2013). According to their typology, individuals presenting with paraphilic hypersexuality tend to show subclinical levels of paraphilic interests, which drive a seeking for novelty. This novelty can be played out in increasingly kinky pornography viewing, or, in this case, a proclivity to molest children. In this context then, impulsivity would be a feature of paraphilic hypersexuality.

Regarding the second hypothesis, it was anticipated that psychopathic and narcissistic traits would be differentiating a subgroup of males most likely to convert fantasies into deviant sexual behaviours. This prediction was primarily based on the work of Williams et al., (2009) with a community sample of undergraduates, as well as research by Dean & Malamuth (1997) and Meloy (2000), which argued for the crucial role of narcissism in sexual offending. Unlike Williams et al., however, our data analytic strategy separated Factor 1 and Factor 2 Psychopathy into two components. "Surgent narcissism," composed of narcissistic traits, venturesomeness, and an interpersonal and affective lifestyle marked by callousness, grandiosity, and superficial charm, was found to moderate the fantasy – molestation proclivity relationship. In particular, males scoring low in "Surgent narcissism" were more likely to have higher molestation proclivity scores than males scoring in the medium to high range on "Surgent narcissism." In other words, traits like venturesomeness, callousness, and superficial charm do not seem useful in identifying males more prone to acting on their fantasies by molesting children. This finding is generally in line with prior research by Serin et al., (2001) and Porter et al., (2000).

## **Hypothesis 3**

The third hypothesis under investigation concerned the role of anger in the fantasy-

behaviour relationship. Based on prior research by Howells et al., (2004) and Malamuth et al., (1991), it was hypothesized that males endorsing high levels of trait anger would be more susceptible to sexually act out their fantasies. As with impulsivity, this *anger* hypothesis was investigated at two levels: a more general behaviour level, and a more specific rape- and molestation- proclivity level.

In line with our prediction, it was found that endorsing any anger significantly moderated the fantasy-general behaviour relationship. In particular, it was low-to-moderate levels of anger, more so than high anger, which facilitated the translation of fantasies into aberrant sexual acts. Although there was support for our prediction that highly angry individuals would be more prone to acting on their fantasies, we did not anticipate that even low levels of anger would be involved in the fantasy-behaviour relationship. Moreover, judging by the pattern in Figure 1, it seems that high anger has a quasi-attenuating effect on the association between fantasy and behaviour, relative to low anger. It is possible that the observed pattern may be related to the motivation for engaging in aberrant sexual acts. For example, it could be that if the acts are fantasy-driven, they are less likely to be a by-product of anger and subsequent hostile aggression (as opposed to instrumental aggression). This argument is consonant with prior work that conceptualizes fantasy as a form of planning (Gee et al., 2003). Alternatively, it is possible that fantasies provide some form of affect regulation (Cortoni & Marshall, 2001; Gee et al., 2003; Looman, 1995), which would predictably deter highly angry individuals from acting on their fantasies.

At a finer level of analysis, highly angry males were the most likely to convert a positive evaluation of rape into deviant sexual acts. This prediction was in line with our hypothesis and prior research, which has implicated anger in sexual offending (Hanson & Harris, 2000; Howells, et al., 2004; Malamuth et al., 1991). Finally, consistent with prior work (McKibben et al., 1994)

it was found that an interest in pedophilia was less likely to be translated into deviant sexual acts when the individual exhibited moderate-to-high levels of anger. In fact, an attenuating or buffering effect of high anger on the association between pedophilic interest and general deviant sexual behaviour was visible from the pattern of simple slopes in Figure 3.

A secondary aims of this paper was to differentiate between state- and trait-anger in the prediction of behaviour. From a cursory look at the pattern and structure matrices, it seems that state- and trait- anger made an almost equivalent contribution to the component scores, with trait-anger only marginally edging state-anger (see Table 5). Given the quasi-equivalent contribution and without further analysis, a clear determination as to the salience of each anger component to the prediction of sexual behaviour could not be made.

In summary, high levels of anger increased the influence of positive attitudes towards rape on deviant sexual acts; highly angry males endorsing positive evaluations of rape were more prone to acting out sexually. Similarly, anger was crucial to translating deviant fantasizing into deviant acting out. Although a slight attenuation effect was noticeable in the graph, suggesting that higher levels of anger buffered the effect of fantasies on general aberrant sexual behaviour, it was not clear that the attenuation was sufficient to drastically decrease deviant sexual acts. High anger did, however, serve as a buffer for individuals with an erotic interest in children. In this case, highly angry males were less susceptible to converting their pedophilic interest into more aberrant sexual acts.

## **Hypothesis 4**

For the fourth major hypothesis of this investigation, it was expected that elevated offense-supportive cognitions would identify individuals who were more likely to act on their fantasies. This hypothesis was investigated at two levels: a more general behaviour level, and a

more specific rape proclivity and child molestation proclivity level.

At the more general fantasy-behaviour level, offense-supportive cognitions did not moderate the association between fantasy and behaviour. Contrary to our hypothesis, males endorsing higher levels of pro rape and molestation cognitions did not show a heightened likelihood of acting on their deviant sexual fantasies. Possessing more offense-supportive cognitions was, however, predictive of engaging in aberrant sexual acts.

At a more specific level of analysis, endorsing more rape-supportive cognitions was not found to moderate the link between fantasy and rape proclivity. In other words, males demonstrating elevated levels of offense-supportive cognitions were no more susceptible to acting on their fantasies than others endorsing fewer distortions. Although the relationship between fantasies and rape proclivity was not conditional on offense-supportive cognitions, said cognitions were a significant predictor of rape proclivity. Specifically, elevated levels of offense-supportive cognitions predicted an increase in the behavioral tendency to rape. Such a finding is in fact consistent with research on both offender (Hanson & Harris, 2000) and non-offender samples (Dean & Malamuth, 1997).

Similar to rape proclivity, the fantasy-child molestation proclivity association was not moderated by an individual's endorsement of offense-supportive cognitions. These cognitive distortions, however, were predictive of molestation proclivity scores. The relationship observed was such that endorsing more distortions significantly predicted higher molestation proclivity scores. This result is in line with Proulx and colleagues (1999), who found that DSF and offense-supportive cognitions were the disinhibitors most frequently experienced by the child sex offenders in their sample.

When distorted cognitions were assessed for their effect on the association between an

interest in pedophilia and molestation proclivity, cognitions emerged as a significant moderator. The moderation was only visible at low levels of offense supportive cognitions, suggesting that males endorsing fewer distorted cognitions were less likely to be translate their pedophilic interest into greater molestation proclivity. Although not statistically significant, the pattern of the graph suggested that highly cognitively distorted males were more likely to act on their pedophilic interest. The results from this analysis were therefore in line with our original prediction and prior research, which has found offense-supportive cognitions to be a crucial element in sexual offending against children (Bumby, 1996; Hanson & Harris, 2000; Proulx et al., 1999).

Overall, results suggested that elevated levels of offense-supportive cognitions may be useful in identifying males with a pedophilic interest that are more likely to act on them. The failure of offense-supportive cognitions to moderate the effect of fantasy on behaviour may have been due to shared method variance, as self-report measures were used to assess the variables involved. On the other hand, pedophilic interest was measured through a Viewing Time task.

The present set of findings also supported the contention that holding distorted views regarding sexual offending significantly predicted engaging in deviant sexual acts. In addition, such cognitions were also predictive of an elevated likelihood of raping and molesting. The conclusion that offense-supportive attitudes are crucial to the likelihood of future sexual offending behaviour speaks to their importance as treatment targets in therapy. A cognitive-behavioural modality in particular may be especially useful in targeting distortions that allow some males to justify or minimize the illegal acts they are tempted to engage in.

## **Implications for Practice and Policy**

The finding that offense-supportive cognitions not only moderate the relationship

between an interest in pedophilia and molestation proclivity, but also specifically predict molestation proclivity, rape proclivity, as well as engagement of deviant sexual acts, reinforces the utility of these cognitions as therapeutic targets. A cognitive-behavioural modality in particular may be valuable in targeting such distortions.

In addition to distorted cognitions, the ability of anger to facilitate the translation of positive rape evaluation into deviant sexual behaviour also appears to be of therapeutic interest. From an emotion-focused perspective, one could reasonably speculate that the anger experienced by these males is potentially secondary to more vulnerable emotions of maladaptive shame or fear (Paivio & Pascual-Leone, 2011). Such defensive anger may be activated in reaction to perceived challenges to one's masculinity. The usefulness of exploring defensive anger has been demonstrated in prior research. For example, an experientially-focused manualized treatment for offenders of interpersonal violence, which included exploration of defensive anger, successfully reduced recidivism rates relative to matched controls (Pascual-Leone, Bierman, Arnold, & Stasiak, 2011).

In light of the aforementioned clinical implications, there appears to be compelling rehabilitation potential for individuals experiencing elevated levels of deviant sexual interest or fantasies. Such a conclusion impacts criminal justice policy insofar tipping the balance in favour of rehabilitation, as opposed to punishment and/or incarceration, to treat individuals at risk of offending or reoffending.

### **Limitations & Future Directions**

One of the unique contributions of this investigation was its use of multi-method assessment for some of the variables of interest. To this end, in addition to self-report instruments, four implicit tasks (two Implicit Association Tasks and two Viewing Time Tasks)

were employed in order to assess deviant sexual preferences. Despite the appeal and simplistic elegance of these novel implicit procedures, only the Child-Sex IAT has received some psychometric attention (Gray et al., 2005). The RE-IAT, on the other hand, is still in its early stages of development. As the measure is still in the process of validation, any conclusions resulting from its use are to be considered cautiously. The procedure used in the Viewing Time tasks has become well publicized through the work of Gene Abel and colleagues. Although the method has received some support, the stimuli used in the VT – Sadomasochism task were not standardized. As such, any conclusions resulting from our Viewing Time tasks remain limited and tentative. The results of the present investigation will no doubt assist future researchers in further refining, validating, and incorporating implicit measures into their assessment of deviant sexual interest, fantasy, and behaviour.

A related measurement issue was the use of the MASA scale to assess both fantasies (the predictor) and behaviours (the outcome). Although there are considerable limitations to doing this, such as shared method variance, said scale was employed because of the scarcity of alternatives. Clearly, more instruments need to be developed and validated in order to inform our understanding of the interrelationships between deviant fantasies and behaviours.

Another limitation was evident in the use of the DSF definition. Although the present investigation did define DSF for the manuscript, it did not provide an elaborate definition to its participants. Rather, the instructions simply drew a parallel between daydreams and fantasies, but did not make explicit the story-like nature of fantasies under investigation. Future studies may wish to provide their participants with a succinct definition of fantasies. In addition, future studies may wish to construct DSF scales with instructions and items that vary depending on the sex of the participant and their sexual orientation.

Despite the mostly comorbid nature of paraphilic interests, our set of findings highlight the need to conduct more finely-grained analyses in order to achieve a more nuanced and comprehensive understanding of the contribution of specific risk factors. For example, significant findings were more often visible at the more specific level of rape and molestation, as opposed to the more general index of deviant sexual behaviour. If we are to pursue this level of exploration, then assessment instruments need to be developed that are specific to a certain paraphilic interest. Moreover, any instruments developed should go beyond asking for the frequency of a fantasy and/or behaviour, into assessing the nature (e.g., duration, frequency, intensity, etc.) of paraphilias.

An additional limitation concerned our failure to differentiate between consensual and non-consensual sexual acts. There is good reason to suspect that there are differences between individuals who enact paraphilic behaviours with consent, and those who engage in such behaviours without a partner's consent. For example, those operating without consent may have a stronger tendency towards criminal sexual offending, less cognitive control, intimacy deficits, etc. In the future, distinguishing between consensual versus non-consensual behaviour and fantasy would add another layer of information that is likely to improve our understanding of deviant sexual fantasies and behaviours.

Power concerns are another limitation of this study. Moderation analyses are notorious for having low statistical power and therefore failing to detect effects that may be truly present. The issue of power in the current project was compounded by the use of a large number of variables, which further restricted sensitivity to any effects. Future work can focus on fewer variables of interest and rely on a large sample of participants in order to guard against Type II errors.

Based on prior work, a crucial assumption of this paper was that fantasies preceded behaviours. As the design of the current study was neither experimental nor longitudinal, this was a particularly difficult assumption to assess. In fact, given that participants reported on past behaviours with no particular timelines as to acts or fantasies, it could very well be that sexual acts predated and may have even given rise to fantasies. Such an argument has in fact been made before by Sheldon and Howitt (2008), who speculated that sex offenders may engage in deviant sexual acts in order to generate fantasies. In a similar vein, Dandescu and Wolfe (2003) also conceived that fantasies could develop at the post-offense stage. Future research should consider the use of longitudinal methods in order to get a clearer picture of how fantasies lead to behaviours.

Although the current investigation did attempt to refine and extent the existing literature, there are some concerns with respect to ecological validity. As the study was limited to an undergraduate sample, we cannot state with any certainty that the results are applicable to other populations, such as forensic samples. Moreover, since our recruitment method was convenience sampling, it is possible that the participants held more positive or open-minded attitudes about sexuality (Plaud, Gaither, Hegstad, Rowan, & Devitt, 1999). In addition, they may also be more likely to have experienced a variety of sexual behaviours (Plaud et al., 1999), which could also skew our findings. Further research with hypotheses closely paralleling the current investigation can be conducted on forensic samples in order to ascertain the extent to which results from both samples are comparable.

### REFERENCES

- Abel, G. G., & Blanchard, E. B. (1974). The role of fantasy in the treatment of sexual deviation.

  Archives of General Psychiatry, 30(4), 467-475.
- Abel, G. G., Huffman, J., Warberg, B., & Holland, C. L. (1998). Visual reaction time and plethysmoFigurey as measures of sexual interest in child molesters. *Sexual Abuse: A Journal of Research and Treatment*, 10(2), 81-95. doi:10.1177/107906329801000202
- Abel, G. G, & Rouleau, J.-L. (1990). The nature and extent of sexual assault. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 9-21). New York, NY: Plenum Press.
- Ahlers, C. J., Schaefer, G. A., Mundt, I. A., Roll, S., Englert, H., Willich, S. N., & Beier, K. M. (2011). How unusual are the contents of paraphilias? Paraphilia-associated sexual arousal patterns in a community-based sample of men. *The Journal of Sexual Medicine*, 8(5), 1362-70. doi:10.1111/j.1743-6109.2009.01597.x
- Akerman, G., & Beech, A. R. (2011). A systematic review of measures of deviant sexual interest and arousal. *Psychiatry*, *Psychology and Law*, *19*(1), 118-143.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism.

  Journal of Research in Personality, 40(4), 440-450. doi:10.1016/j.jrp.2005.03.002
- Banse, R., Schmidt, A. F., & Clarbour, J. (2010). Indirect measures of sexual Interest in child sex offenders: A multimethod approach. *Criminal Justice and Behaviour*, *37*(3), 319-335. doi:10.1177/0093854809357598
- Barbaree, H. E., Seto, M. C., Serin, R. C., Amos, N. L., & Preston, D. L. (1994). Comparisons

#### EFFECT OF DEVIANT SEXUAL FANTASIES

- between sexual and nonsexual rapist subtypes: Sexual arousal to rape, offense precursors, and offense characteristics. *Criminal Justice and Behaviour*, 21(1), 95-114.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.
- Bartels, R. M., & Gannon, T. A. (2011). Understanding the sexual fantasies of sex offenders and their correlates. *Aggression and Violent Behaviour*, 16(6), 551-561. Elsevier Ltd. doi:10.1016/j.avb.2011.08.002
- Beauregard, E., Lussier, P., & Proulx, J. (2004). An exploration of developmental factors related to deviant sexual preferences among adult rapists. *Sexual Abuse: A Journal of Research and Treatment*, 16(2), 151-161. doi:10.1177/107906320401600205
- Belohlavek, R., Klir, G. J., Lewis, H. W., & Way, E. C. (2009). Concepts and fuzzy sets:

  Misunderstandings, misconceptions, and oversights. *International Journal of Approximate*Reasoning, 51(1), 23-34. Elsevier Inc. doi:10.1016/j.ijar.2009.06.012
- Bohner, G., Pina, A., Tendayi Viki, G., & Siebler, F. (2010). Using social norms to reduce men's rape proclivity: Perceived rape myth acceptance of out-groups may be more influential than that of in-groups. *Psychology, Crime & Law*, *16*(8), 671-693.

  doi:10.1080/1068316X.2010.492349
- Bohner, G., Reinhard, Â., Rutz, S., Sturm, S., & Effler, D. (1998). Rape myths as neutralizing cognitions: Evidence for a causal impact of anti-victim attitudes on men's self-reported likelihood of raping. *European Journal of Social Psychology*, 28, 257-268.
- Bumby, K. M. (1996). Assessing the cognitive distortions of child molesters and rapists:

  Development and validation of the MOLEST and RAPE scales. *Sexual Abuse: A Journal of*

#### EFFECT OF DEVIANT SEXUAL FANTASIES

- Research and Treatment, 8(1), 37-54.
- Burgess, A. W., Hartman, C. R., Ressler, R. K., Douglas, J. E., & McCormack, A. (1986).

  Sexual Homicide: A motivational model. *Journal of Interpersonal Violence*, 1(3), 251-272.

  doi:10.1177/088626086001003001
- Carlstedt, M., Bood, S. A., & Norlander, T. (2011). The affective personality and its relation to sexual fantasies in regard to the Wilson Sex Fantasy Questionnaire. *Psychology*, 2(8), 792-796.
- Chapleau, K. M., & Oswald, D. L. (2010). Power, sex, and rape myth acceptance: Testing two models of rape proclivity. *Journal of Sex Research*, 47(1), 66-78. doi:10.1080/00224490902954323
- Cohen, J. (1990). Things I have learned (so far). *American*, 45(12), 1304-1312.
- Cohen, Jacob. (1992). A power primer. Psychological Bulletin, 112(1), 155-159.
- Cohen, J., Cohen, P., West, S. G., Aiken, L. S. (2003). Applied Multiple Regression/Correlation

  Analysis for the Behavioral Sciences (3<sup>rd</sup> ed.). Mahwah, NJ: Erlbaum.
- Cortoni, F., & Marshall, W. L. (2001). Sex as a coping strategy and its relationship to juvenile sexual history and intimacy in sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 13(1), 27-43.
- Culhane, S. E., & Morera, O. F. (2010). Reliability and validity of the Novaco Anger Scale and Provocation Inventory (NAS-PI) and State-Trait Anger Expression Inventory-2 (STAXI-2) in Hispanic and non-Hispanic white student samples. *Hispanic Journal of Behavioural Sciences*, 32(4), 586-606. doi:10.1177/0739986310381458
- Curnoe, S., & Langevin, R. (2002). Personality and deviant sexual fantasies: An examination of the MMPIs of sex offenders. *Journal of Clinical Psychology*, 58(7), 803-15.

- doi:10.1002/jclp.2006
- Daleiden, E. L., Kaufman, K. L., Hilliker, D. R., & O'Neil, J. N. (1998). The sexual histories and fantasies of youthful males: A comparison of sexual offending, nonsexual offending, and nonoffending groups. *Sexual Abuse: A Journal of Research and Treatment*, *10*(3), 195-209. doi:10.1177/107906329801000304
- Dandescu, A., & Wolfe, R. (2003). Considerations on fantasy use by child molesters and exhibitionists. *Sexual Abuse: A Journal of Research and Treatment*, *15*(4), 297-305. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/14571535
- Dean, K. E., & Malamuth, N. M. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and moderating variables. *Journal of Personality and Social Psychology*, 72(2), 449-55. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9107010
- Deffenbacher, J. L., Oetting, E. R., Thwaites, G. A., Lynch, R. S., Baker, D. A., Stark, R. S., Thacker, S., et al. (1996). State-trait anger theory and utility of the trait anger scale. *Journal of Counseling Psychology*, 43(2), 131-148.
- Deu, N., & Edelmann, R. J. (1997). The role of criminal fantasy in predatory and opportunist sex offending. *Journal of Interpersonal Violence*, 12(1), 18-29.
- Emmons, R. A. (1984). Factor analysis and construct validity of the Narcissistic Personality Inventory. *Journal of Personality Assessment*, 48(3), 291-300.
- Eysenck, S. B. G. (1993). The I<sub>7</sub>: Development of a measure of impulsivity and its relationship to the superfactors of personality. In W. G. McCown, J. L. Johnson, & M. B. Shure (Eds.), *The impulsive client: Theory, research, and treatment* (pp. 141-149). Washington, DC:

  American Psychological Association.

- Eysenck, S. B. G., Pearson, P. R., Easting, G., & Allsopp, J. F. (1985). Age norms for impulsiveness, venturesomeness, and empathy in adults. *Personality and Individual Differences*, 6(5), 613-619.
- Field, A. P. (2009). Discovering statistics using SPSS (3rd ed.). Los Angeles; Sage Publications.
- Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (pp. 269–314). Charlotte, NC: Information Age.
- Ford, H., & Cortoni, F. (2008). Sexual deviance in females: Assessment and treatment. In D.R. Laws & W. T. O'Donohue (Eds.), *Sexual deviance: Theory, assessment, and treatment* (2nd ed., pp. 508-526). New York, NY: The Guilford Press.
- Gaither, G. a, Sellbom, M., & Meier, B. P. (2003). The effect of stimulus content on volunteering for sexual interest research among college students. *Journal of Sex Research*, 40(3), 240-248. doi:10.1080/00224490309552188
- Gannon, T. A., & O'Connor, A. (2011). The development of the interest in child molestation scale. *Sexual Abuse: A Journal of Research and Treatment*, 23(4), 474-93. doi:10.1177/1079063211412390
- Gee, D. G., Devilly, G. J., & Ward, T. (2004). The content of sexual fantasies for sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 16(4), 315-31. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15560414
- Gee, D., Ward, T., & Eccleston, L. (2003). The function of sexual fantasies for sexual offenders:

  A preliminary model. *Behaviour Change*, 20(01), 44-60. doi:10.1375/bech.20.1.44.24846
- Gellerman, D. M., & Suddath, R. (2005). Violent fantasy, dangerousness, and the duty to warn and protect. *The journal of the American Academy of Psychiatry and the Law*, 33(4), 484-

- 95. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/16394225
- Gray, N. S., Brown, A. S., MacCulloch, M. J., Smith, J., & Snowden, R. J. (2005). An implicit test of the associations between children and sex in pedophiles. *Journal of Abnormal Psychology*, 114(2), 304-8. doi:10.1037/0021-843X.114.2.304
- Gray, N. S., & Snowden, R. J. (2009). The implicit association test as a measure of sexual interest. In D. Thornton & D. R. Laws (Eds.), *Cognitive approaches to the assessment of sexual interest in sexual offenders* (pp. 101-123). Chichester, UK: Wiley-Blackwell.
- Gray, N. S., Watt, A., Hassan, S., & Macculloch, M. J. (2003). Behavioural indicators of sadistic sexual murder predict the presence of sadistic sexual fantasy in a normative sample. *Journal of Interpersonal Violence*, 18(9), 1018-1034. doi:10.1177/0886260503254462
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, *26*, 499-510.
- Greendlinger, V., & Byrne, D. (1987). Coercive sexual fantasies of college men as predictors of self-reported likelihood to rape and overt sexual aggression. *Journal of Sex Research*, 23(1), 1-11.
- Greenwald, A. G., Nosek, B. a., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197-216. doi:10.1037/0022-3514.85.2.197
- Gress, C. L. Z. (2005). Viewing time measures and sexual interest: Another piece of the puzzle. *Journal of Sexual Aggression*, 11(2), 117-125. doi:10.1080/13552600500063666
- Gress, L. Z., & Laws, D. R. (2009). Cognitive modelling of sexual arousal and interest: Choice reaction time measures. In D. Thornton & D. R. Laws (Eds.), *Cognitive approaches to the assessment of sexual interest in sexual offenders* (pp. 85-99). Chichester, UK: Wiley-

Blackwell.

- Hanson, R. K., & Harris, A. R. (2000). Where should we intervene? Dynamic predictors of sexual offense recidivism. *Criminal Justice and Behaviour*, 27(I), 6-35.
- Hanson, R. K., & Morton-Bourgon, K. E. (2005). The characteristics of persistent sexual offenders: A meta-analysis of recidivism studies. *Journal of Consulting and Clinical Psychology*, 73(6), 1154-63. doi:10.1037/0022-006X.73.6.1154
- Hare, R. D. (2003). *Manual for the Revised Psychopathy Checklist, 2nd ed*. Toronto, ON: Multi-Health Systems.
- Harris, J. (2003). About Wordcount. Retrieved July 11, 2012, from http://www.wordcount.org/main.php
- Heil, P., & Simons, D. (2008). Multiple paraphillias. In D.R. Laws & W. T. O'Donohue (Eds.),Sexual deviance: Theory, assessment, and treatment (2nd ed., pp. 527-556). New York,NY: Guilford Press.
- Howells, K., Day, A., & Wright, S. (2004). Affect, emotions and sex offending. *Psychology*, *Crime & Law*, 10(2), 179-195. doi:10.1080/10683160310001609988
- Howitt, D. (2004). What is the role of fantasy in sex offending? *Criminal Behaviour and Mental Health*, 14(3), 182-8. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15614321
- Johnson, G. M., & Knight, R. a. (2000). Developmental antecedents of sexual coercion in juvenile sexual offenders. Sexual Abuse: A Journal of Research and Treatment, 12(3), 165-78. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/10904989
- Kalichman, S. C., Johnson, J. R., Adair, V., Rompa, D., Multhauf, K., & Kelly, J. a. (1994).

  Sexual Sensation Seeking: Scale development and predicting AIDS-risk behaviour among homosexually active men. *Journal of Personality Assessment*, 62(3), 385-97.

- doi:10.1207/s15327752jpa6203\_1
- Kalichman, S. C., & Rompa, D. (1995). Sexual Sensation Seeking and Sexual Compulsivity Scales: Reliability, validity, and predicting HIV risk behaviour. *Journal of Personality Assessment*, 65(3), 586-601. doi:10.1207/s15327752jpa6503\_16
- Kassinove, H., & Sukhodolsky, D. G. (1995). Anger disorders: Basic science and practice issues.

  In H. Kassinove (Ed.), *Anger disorders: Definitions, diagnosis and treatment* (pp. 1-26).

  Washington, DC: Taylor & Francis.
- Knight, R. A., Prentky, R. A., & Cerce, D. D. (1994). The development, reliability, and validity of an inventory for the multidimensional assessment of sex and aggression. *Criminal Justice and Behaviour*, 21(I), 72-94.
- Kraemer, H. C., Stice, E., Kazdin, A., Offord, D., & Kupfer, D. (2001). How do risk factors work together? Mediators, moderators, and independent, overlapping, and proxy risk factors. *American Journal of Psychiatry*, 158(6), 848-856.
- Lane, K. A., Banaji, M. R., Nosek, B. A., & Greenwald, A. G. (2007). Understanding and using the Implicit Association Test: IV What We Know (So Far) about the Method. *Implicit Measures of Attitudes* (pp. 59-102).
- Langevin, R., Lang, R. a., & Curnoe, S. (1998). The prevalence of sex offenders with deviant fantasies. *Journal of Interpersonal Violence*, 13(3), 315-327. doi:10.1177/088626098013003001
- Laws, D.R., & Marshall, W. L. (1990). A conditioning theory of the etiology and maintenance of deviant sexual preference and behaviour. In W.L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 209-229). New York, NY: Plenum Press.

- Laws, D. Richard, & Gress, C. L. Z. (2004). Seeing things differently: The viewing time alternative to penile plethysmoFigurey. *Legal and Criminological Psychology*, 9(2), 183-196. doi:10.1348/1355325041719338
- Laws, R. D., & O'Donohue, W. T. (2008). Introduction. In D.R. Laws & W. T. O'Donohue (Eds.), *Sexual deviance: Theory, assessment, and treatment* (2nd ed., pp. 1-20). New York, NY: The Guilford Press.
- Leitenberg, H., & Henning, K. (1995). Sexual fantasy. *Psychological Bulletin*, *117*(3), 469-96. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/7777650
- Looman, J. (1995). Sexual fantasies of child molesters. *Canadian Journal of Behavioural Science*, 27(3), 321-332. Retrieved from http://psycnet.apa.org/journals/cbs/27/3/321/
- Malamuth, N. M., Sockloskie, R., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students.

  \*Journal of Consulting and Clinical Psychology, 59(5), 670-681.
- Maniglio, R. (2011). The role of childhood trauma, psychological problems, and coping in the development of deviant sexual fantasies in sexual offenders. *Clinical Psychology Review*, 31(5), 748-756. Elsevier Ltd. doi:10.1016/j.cpr.2011.03.003
- Mann, R. E., & Hollin, C. R. (2007). Sexual offenders' explanations for their offending. *Journal of Sexual Aggression*, 13(1), 3-9. doi:10.1080/13552600701365621
- Marshall, William L, & Marshall, L. E. (2000). The origins of sexual offending. *Trauma*, *Violence*, & *Abuse*, 1(3), 250-263.
- Marshall, W.L., & Barbaree, H. E. (1990). An Integrated Theory of the etiology of sexual offending. In W.L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 257-275). New York: Plenum

Press.

- McCollaum, B., & Lester, D. (1994). Violent sexual fantasies and sexual behaviour.

  \*Psychological Reports, 75(2), 742. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/7862781
- McCoy, K., & Fremouw, W. (2010). The relation between negative affect and sexual offending:

  A critical review. *Clinical Psychology Review*, 30(3), 317-25. Elsevier Ltd.

  doi:10.1016/j.cpr.2009.12.006
- McKibben, A., Proulx, J., & Lusignan, R. (1994). Relationships between conflict, affect and deviant sexual behaviours in rapists and pedophiles. *Behaviour Research and Therapy*, 32(5), 571-575.
- Meloy, J. R. (2000). The nature and dynamics of sexual homicide: An integrative review.

  \*Aggression and Violent Behaviour, 5(1), 1-22.
- Mihailides, S., Devilly, G. J., & Ward, T. (2004). Implicit cognitive distortions and sexual offending. *Sexual Abuse: A Journal of Research and Treatment*, *16*(4), 333-50. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15560415
- Mitchell, T. R. (1985). An evaluation of the validity of correlational research conducted in organizations. *Academy of Management Review*, 10(2), 192-205.
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2007). The Implicit Association Test at age 7:

  A methodological and conceptual review. In J. A. Bargh (Ed.), *Automatic Processes in Social Thinking and Behaviour* (pp. 265-292). Psychology Press.
- Nosek, B. a., Banaji, M., & Greenwald, A. G. (2002). Harvesting implicit group attitudes and beliefs from a demonstration web site. *Group Dynamics: Theory, Research, and Practice*, 6(1), 101-115. doi:10.1037//1089-2699.6.1.101

- Nosek, B. a, Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the Implicit Association Test: II. Method variables and construct validity. *Personality & social psychology bulletin*, 31(2), 166-80. doi:10.1177/0146167204271418
- Nunes, K. L., Ratcliffe, K., Babchishin, K. M., & Kessous, N. (2008). Implicit and explicit evaluation of rape. 27th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers. Atlanta, Georgia.
- O Ciardha, C. (2011). A theoretical framework for understanding deviant sexual interest and cognitive distortions as overlapping constructs contributing to sexual offending against children. *Aggression and Violent Behaviour*, 16(6), 493-502. doi:10.1016/j.avb.2011.05.001
- Olver, M. E., & Wong, S. C. P. (2006). Psychopathy, sexual deviance, and recidivism among sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 18(1), 65-82.
- Paivio, S., & Pascual-Leone, A. (2010). *Emotion-focused therapy for trauma*. Washington, DC: American Psychological Association.
- Pascual-Leone, A., Bierman, R., Arnold, B., & Stasiak, E. (2011). Emotion-focused therapy for incarcerated offenders of intimate partner violence: A 3-year outcome using a new whole-sample matching method. *Psychotherapy Research*, *21*, 331-347.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R.Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 18-59). San Diego, CA: Academic Press, Inc.
- Paulhus, D. L., Neumann, C. S., & Hare, R. D. (n.d.). *Manual for the Self-Report Psychopathy* (SRP) scale. Toronto: Multi-Health Systems.
- Plaud, Joseph J, & Bigwood, S. J. (1997). A multivariate analysis of the sexual fantasy themes of college men. *Journal of Sex & Marital Therapy*, 23(3), 221-230.

- Plaud, J.J., Gaither, G. A., Hegstad, H. J., Rowan, L., & Devitt, M. K. (1999). Volunteer bias in human psychophysiological sexual arousal research: To whom do our research results apply? *The Journal of Sex Research*, *36*(2), 171-179.
- Polaschek, D., & Gannon, T. A. (2004). The implicit theories of rapists: What convicted offenders tell us. *Sexual Abuse: A Journal of Research and Treatment*, 16(4), 299-314.
- Porter, S., David, F., Drugge, J., Hervé, H., Birt, A., & Boe, D. P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behaviour*, 27(2), 216-233.
- Prentky, R., Burgess, A. W., Rokous, F., Lee, A., Hartman, C., Ressler, R., & Douglas, J. (1989).

  The presumptive role of fantasy in serial sexual homicide. *The American Journal of Psychiatry*, *146*(7), 887-91. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/2787122
- Princeton University. (2010). About WordNet. WordNet. Retrieved July 11, 2012, from http://wordnet.princeton.edu
- Proulx, J., Perreault, C., & Ouimet, M. (1999). Pathways in the offending process of extrafamilial sexual child molesters. *Sexual Abuse: A Journal of Research and Treatment*, 11(2), 117-129.
- Ramírez, J. M., & Andreu, J. M. (2006). Aggression, and some related psychological constructs (anger, hostility, and impulsivity); Some comments from a research project. *Neuroscience and Biobehavioural Reviews*, 30(3), 276-91. doi:10.1016/j.neubiorev.2005.04.015
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45(2), 590. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/538183
- Renaud, C. A., & Byers, E. S. (1999). Exploring the frequency, diversity, and content of university students' positive and negative sexual cognitions. *The Canadian Journal of*

- *Human Sexuality*, 8(1), 17-30.
- Seara-Cardoso, A., Neumann, C., Roiser, J., McCrory, E., & Viding, E. (2012). Investigating associations between empathy, morality and psychopathic personality traits in the general population. *Personality and Individual Differences*, 52(1), 67-71. Elsevier Ltd. doi:10.1016/j.paid.2011.08.029
- Serin, R. C., Mailloux, D. L., & Malcolm, P. B. (2001). Psychopathy, deviant sexual arousal, and recidivism among sexual offenders. *Journal of Interpersonal Violence*, *16*(3), 234-246. doi:10.1177/088626001016003004
- Seto, M. C. (2009). Pedophilia. *Annual Review of Clinical Psychology*, 5, 391-407. doi:10.1146/annurev.clinpsy.032408.153618
- Sheldon, K., & Howitt, D. (2008). Sexual fantasy in paedophile offenders: Can any model explain satisfactorily new findings from a study of Internet and contact sexual offenders?

  Legal and Criminological Psychology, 13(1), 137-158. doi:10.1348/135532506X173045
- Skeem, J. J. L., Poythress, N., Edens, J. J. F., Lilienfeld, S. O., Ellison, M., & Cale, E. M. (2003).

  Psychopathic personality or personalities? Exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behaviour*, 8(5), 513-546. doi:10.1016/S1359-1789(02)00098-8
- Skeem, J. L., Polaschek, D. L. L., Patrick, C. J., & Lilienfeld, S. O. (2011). Psychopathic Personality: Bridging the Gap Between Scientific Evidence and Public Policy. *Psychological Science in the Public Interest*, 12(3), 95-162. doi:10.1177/1529100611426706
- Skovran, L. C., Huss, M. T., & Scalora, M. J. (2010). Sexual fantasies and sensation seeking among psychopathic sexual offenders. *Psychology Crime Law*, 16(7), 617-629.

- doi:10.1080/10683160902998025
- Smith, C. E., Fischer, K. W., & Watson, M. W. (2009). Toward a refined view of aggressive fantasy as a risk factor for aggression: Interaction effects involving cognitive and situational variables. *Aggressive Behaviour*, *35*(4), 313-23. doi:10.1002/ab.20307
- Snowden, R. J., Craig, R. L., & Gray, N. S. (2011). Indirect behavioural measures of cognition among sexual offenders. *Journal of Sex Research*, 48(2-3), 192-217. doi:10.1080/00224499.2011.557750
- Spielberger, C. D., Reheiser, E. C., & Sydeman, S. J. (1995). Measuring the experience, expression, and control of anger. In H. Kassinove (Ed.), *Anger disorders: Definitions, diagnosis and treatment* (pp. 49-67). Washington, DC: Taylor & Francis.
- Stanford, M. S., Mathias, C. W., Dougherty, D. M., Lake, S. L., Anderson, N. E., & Patton, J. H. (2009). Fifty years of the Barratt Impulsiveness Scale: An update and review. *Personality and Individual Differences*, 47(5), 385-395. Elsevier Ltd. doi:10.1016/j.paid.2009.04.008
- Stevens, J. P. (2009). *Applied Multivariate Statistics for the Social Sciences* (5<sup>th</sup> ed.). New York: Routledge.
- Stöber, J., Dette, D. E., & Musch, J. (2002). Comparing continuous and dichotomous scoring of the Balanced Inventory of Desirable Responding. *Journal of Personality Assessment*, 78(2), 370-389.
- Tabachnik, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5<sup>th</sup> ed.). Boston, MA: Pearson.
- Templeman, T. L., & Stinnett, R. D. (1991). Patterns of sexual arousal and history in a "normal" sample of young men. *Archives of Sexual Behaviour*, 20(2), 137-150.
- Thornton, D., & Laws, D. R. (2009). Postscript: Steps towards effective assessment of sexual

- interest. In D. Thornton & D. R. Laws (Eds.), *Cognitive approaches to the assessment of sexual interest in sexual offenders* (pp. 225-227). Chichester, UK: Wiley-Blackwell.
- Thurstone, L. L. (1947). *Multiple-factor analysis*. Chicago: The University of Chicago Press.
- Ward, T., & Beech, A. R. (2008). An Integrated Theory of Sexual Offending. In D.R. Laws & W. T. O'Donohue (Eds.), *Sexual deviance: Theory, assessment, and treatment* (2nd ed., pp. 21-36). New York, NY: The Guilford Press.
- Ward, T., & Keenan, T. (1999). Child molesters' implicit theories. *Journal of Interpersonal Violence*, 14(8), 821-838.
- Warren, J. I., Hazelwood, R. R., & Dietz, P. E. (1996). The sexually sadistic serial killer. *Journal of Forensic Sciences*, 41(6), 970-4. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/8914287
- Williams, K. M., Cooper, B. S., Howell, T. M., Yuille, J. C., & Paulhus, D. L. (2008). Inferring sexually deviant behaviour from corresponding fantasies: The role of personality and pornography consumption. *Criminal Justice and Behaviour*, *36*(2), 198-222. doi:10.1177/0093854808327277
- Williams, K. M., Paulhus, D. L., & Hare, R. D. (2007). Capturing the four-factor structure of psychopathy in college students via self-report. *Journal of Personality Assessment*, 88(2), 205-19. doi:10.1080/00223890701268074
- Wilson, G. D., & Lang, R. . (1981). Sex differences in sexual fantasy patterns. *Journal of Personality and Individual Differences*, 2(1), 343-346.
- Woodworth, M., & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111(3), 436-445. doi:10.1037//0021-843X.111.3.436

Zurbriggen, E. L., & Yost, M. R. (2004). Power, desire, and pleasure in sexual fantasies. *Journal of Sex Research*, *41*(3), 288-300. doi:10.1080/00224490409552236

Table 1
Frequency of Deviant Sexual Fantasies and Deviant Sexual Acts in Non-Offender Samples

Paraphilia	Deviant sexual fantasies	Deviant sexual acts
Exhibitionism	-7% of males (Templeman & Stinnett, 1991); -3.5% of males (Ahlers et al., 2011); -17.6% of females, 41% of males (indecent exposure; Renaud & Byers, 1999); -8.1% of females, 34.7% of males (masturbating in public; Renaud & Byers, 1999); -36-39% (Williams et al., 2008)	-2.2% of males (Ahlers et al., 2011); -19-25% of males (Williams et al., 2008);
Fetishism	-30% of males (Ahlers et al., 2011); -55-58% of males (Williams et al., 2008)	-24.5% of males (Ahlers et al., 2011); -23-27% of males (Williams et al., 2008)
Frotteurism	-13.4% of males (Ahlers et al., 2011); -72-76% of males (Williams et al., 2008)	-35% of males (Templeman & Stinnett, 1991); -6.5% of males (Ahlers et al., 2011); -42-44% of males (Williams et al., 2008)
Masochism	-15.8% of males (Ahlers et al., 2011); -58.8% of females, 72.2% of males (being tied up; Renaud & Byers, 1999); -34.5% of females, 44.4% of males, (being whipped or spanked; Renaud & Byers, 1999); -36.2% of males (being tied up; Crepault & Couture, 1980)	-2.3% of males (Ahlers et al., 2011)
Sadism	-21.8% of males (Ahlers et al., 2011); -46% (Gray et al., 2003); -14.9% of males (humiliate a woman; Crepault & Couture, 1980); -31.2% of females, 59.7% of males (whipping; Renaud & Byers); -62-65% of males (Williams et al., 2008)	-15.5% of males (Ahlers et al., 2011); -22-39% of males (Williams et al., 2008)

Bondage	-58.1% of females, 64.6% of males	-14-23% of males (Williams et al.,
C	(tying someone up; Renaud & Byers,	2008)
	1999);	
	-39.4% of males (tie up a woman;	
	Crepault & Couture, 1980);	
	-52-62% of males (Williams et al., 2008)	
Voyeurism	-54% of males (Templeman & Stinnett,	-42% of males (Templeman &
J	1991);	Stinnett, 1991);
	-34.9% of males (Ahlers et al., 2011);	-18% of males (Ahlers et al., 2011);
	-54.3% of males (Crepault & Couture,	-18-22% of males (Williams et al.,
	1980);	2008)
	-71-83% of males (Williams et al., 2008)	
Pedophilia	-5% of males (Templeman & Stinnett,	-3.8% of males (Ahlers et al., 2011);
-	1991);	-5% of males (Williams et al.,
	-9.5% of males (Ahlers et al., 2011);	2008);
	-9% of males (Briere & Runtz, 1989);	-7% of males (behavioural
	11-13% of males (Williams et al., 2008)	propensity; Briere & Runtz, 1989); -33% of males (behavioural
	2000)	propensity; Gannon & O'Connor,
		2011)
Rape/sexual	-62% of females (fantasies of being	-5% of males (Templeman &
assault	raped; Bivona & Critelli, 2009);	Stinnett, 1991);
	-33% of males (Crepault & Couture, 1980);	-20-25% of males (Williams et al., 2008);
	-18.9% of females, 45.8% of males	-15-25% of males (Malamuth et al.,
	(forcing sex; Renaud & Byers, 1999);	1991);
	-20.3% of females, 27.1% of males	-17.9% of males (Chapleau &
	(being sexually victimized; Renaud &	Oswald, 2010)
	Byers, 1999);	
	-65-68% of males (Williams et al.,	
Transvestism	2008) -4.9% of males (Ahlers et al., 2011);	-2.7% of males (Ahlers et al., 2011);
Tans vestisiii	-4-10% of males (Williams et al.,	-10% of males (Williams et al.,
	2008)	2008)

Table 2
Summary of Variables and Measures Used in the Current Study

Variable	Measure
Predictor variables – Deviant sexual	
fantasies	
Explicit measure	Multidimensional Assessment of Sex and Aggression (MASA) – Fantasy index
Implicit measures	Child-Sex IAT (CSA-IAT); Rape Evaluation IAT (RE-IAT);
	Viewing Time task – Sexual interest in sadomasochism (VT – Sadomasochism);
	Viewing Time task – Sexual interest in Pedophilia (VT – Pedophilia)
Outcome variables – Aberrant sexual	1 /
behaviours	
Direct measure	MASA – Behaviour index
Indirect measures	Rape Proclivity Scale (RP);
	Interest in Child Molestation Scale (ICMS)
Moderator - Impulsivity	Barratt Impulsiveness Scale (BIS-11);
	Eysenck's Impulsiveness Questionnaire (I <sub>7</sub> )
Moderator – Psychopathy-Narcissism	Self-Report Psychopathy – Short Form (SRP-SF)
	Narcissistic Personality Inventory – 16 items (NPI-16)
Moderator – Anger	Multidimensional Anger Inventory (MAI)
Moderator – Offense-supportive	RAPE scale;
Cognitions	MOLEST scale
Control variables	The Balanced Inventory of Desirable Responding –
	Version 6 – Impression Management Scale (BIDR-6);
	Pornography Use Questionnaire;
	Sexual Compulsivity Scale (SCS)

Table 3

Demographic Information for Male (n = 250) and Female (n = 152) Participants

Ethnicity         n (%)         n (%)           Caucasian         165 (66.5%)         108 (71.1%)           African Canadian         11 (4.4%)         11 (7.2%)           Native Canadian         n/a         3 (2.0%)           Hispanic/Latino         n/a         2 (1.3%)           East Asian         n/a         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Passexual         1 (0.4%)         3 (2.0%)           Bisexual         n/a         1 (0.4%)         3 (2	Variables	Males	Females
Caucasian         165 (66.5%)         108 (71.1%)           African Canadian         11 (4.4%)         11 (7.2%)           Native Canadian         n/a         3 (2.0%)           Hispanic/Latino         n/a         2 (1.3%)           East Asian         n/a         4 (2.6%)           South Asian         16 (6.5%)         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         n/a         1 (0.6%)           Relationship Status         n/a         1 (		n (%)	n (%)
African Canadian         11 (4.4%)         11 (7.2%)           Native Canadian         n/a         3 (2.0%)           Hispanic/Latino         n/a         2 (1.3%)           East Asian         n/a         4 (2.6%)           South Asian         16 (6.5%)         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bisexual         n/a         1 (0.6%)           Relationship Status         N/a         1 (0.6%)           Relationship Status         1 (0.4%)         2 (1 (13.8%)           In a relationship         50 (20.1%)	Ethnicity		
Native Canadian         n/a         3 (2.0%)           Hispanic/Latino         n/a         2 (1.3%)           East Asian         n/a         4 (2.6%)           South Asian         16 (6.5%)         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           No sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         14 (5.7%)         3 (2.0%)           Homosexual         14 (5.7%)         3 (2.0%)           Homosexual         10.4%         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         12 (2.66%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)<	Caucasian	165 (66.5%)	108 (71.1%)
Hispanic/Latino         n/a         2 (1.3%)           East Asian         n/a         4 (2.6%)           South Asian         16 (6.5%)         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         7 (4.6%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bisexual         n/a         1 (0.6%)           Relationship Status         Na         1 (0.4%)         3 (2.0%)           Relationship Status         Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Ma	African Canadian	11 (4.4%)	11 (7.2%)
East Asian         n/a         4 (2.6%)           South Asian         16 (6.5%)         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         3 (1.2%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           No sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         4 (4.5.7%)         3 (2.0%)           Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bisexual         n/a         1 (0.6%)           Relationship Status         3 (2.0%)         3 (2.0%)           Relationship Status         3 (2.0%)         4 (10.6%)         4 (2.0%)         2 (13.8%)           In a relationship         5 (20.1%)         49 (32.2%)         4 (2.0%)         8 (5.3%)         8 (5.3%)         8 (5.3%)         8 (5.3%)         8 (5.3%)         8 (5.3%)<	Native Canadian	n/a	3 (2.0%)
South Asian         16 (6.5%)         4 (2.6%)           Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         **Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           No sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         **Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         n/a         1 (0.6%)           Relationship Status         **Single         14 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Sex Partners to Date         **No sex partners to date         34 (18.6%)	Hispanic/Latino	n/a	2 (1.3%)
Middle Eastern         21 (8.5%)         10 (6.6%)           Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         3 (1.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           No sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         No sex partners to date         34 (18.6%)         35 (23.0%)           Between 11 and 20 partners         14 (6.8%)         85 (55.	East Asian	n/a	4 (2.6%)
Pacific Islander         3 (1.2%)         1 (0.7%)           Other         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         3 (1.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           No sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         No sex partners to date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 21 and 30 partners         4 (2.2%)	South Asian	16 (6.5%)	4 (2.6%)
Other Mixed         13 (5.2%)         7 (4.6%)           Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         3 (1.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         No sex partners to date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 21 and 30 partners         4 (2.2%)         2 (1.3%)           Between 31 and 40 partners         4 (	Middle Eastern	21 (8.5%)	10 (6.6%)
Mixed         19 (7.7%)         2 (1.3%)           Psychiatric Diagnosis         3         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         4         16 (10.5%)           Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         5         3 (2.0%)           Relationship Status         5         20.0%)           Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         No sex partners to date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners	Pacific Islander	3 (1.2%)	1 (0.7%)
Psychiatric Diagnosis         Yes       10 (4.0%)       16 (10.5%)         No       229 (92.3%)       134 (88.2%)         Not sure       5 (2.0%)       1 (0.7%)         Sexual Orientation       3 (2.0%)       136 (89.5%)         Heterosexual       228 (92.3%)       136 (89.5%)         Homosexual       14 (5.7%)       3 (2.0%)         Bisexual       n/a       8 (5.3%)         Pansexual       1 (0.4%)       3 (2.0%)         Bi-curious       n/a       1 (0.6%)         Relationship Status       Single       142 (56.6%)       73 (48.0%)         Dating       48 (19.3%)       21 (13.8%)         In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Sex Partners to Date       7 (2.8%)       8 (5.3%)         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 11 and 10 partners       126 (68.9%)       85 (55.9%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact p	Other	13 (5.2%)	7 (4.6%)
Yes         10 (4.0%)         16 (10.5%)           No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         14 (5.7%)         3 (2.0%)           Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         No sex partners to date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 21 and 30 partners         4 (2.2%)         2 (1.3%)           Between 31 and 40 partners         1 (0.5%)         n/a           More than 41 partners         4 (2.2%)         n/a	Mixed	19 (7.7%)	2 (1.3%)
No         229 (92.3%)         134 (88.2%)           Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         14 (5.7%)         136 (89.5%)           Heterosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         No sex partners to date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 21 and 30 partners         4 (2.2%)         2 (1.3%)           Between 31 and 40 partners         4 (2.2%)         n/a           More than 41 partners         4 (2.2%)         n/a           Experienced non-consensual sexual contact prior to 16         Yes         7 (2.8%)         15 (9.9%)           No         231 (92.8%	Psychiatric Diagnosis		
Not sure         5 (2.0%)         1 (0.7%)           Sexual Orientation         Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         Total Status         3 (20.0%)           Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         Sex Partners to Date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 21 and 30 partners         4 (2.2%)         2 (1.3%)           Between 31 and 40 partners         1 (0.5%)         n/a           More than 41 partners         4 (2.2%)         n/a           Experienced non-consensual sexual contact prior to 16         Yes         7 (2.8%)         15 (9.9%)	Yes	10 (4.0%)	16 (10.5%)
Sexual Orientation       Heterosexual       228 (92.3%)       136 (89.5%)         Homosexual       14 (5.7%)       3 (2.0%)         Bisexual       n/a       8 (5.3%)         Pansexual       1 (0.4%)       3 (2.0%)         Bi-curious       n/a       1 (0.6%)         Relationship Status       50 (20.1%)       73 (48.0%)         Dating       48 (19.3%)       21 (13.8%)         In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       4 (2.2%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       Yes       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	No	229 (92.3%)	134 (88.2%)
Heterosexual         228 (92.3%)         136 (89.5%)           Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         Total (10.6%)         73 (48.0%)           Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         Total (10.7%)         8 (5.3%)           No sex partners to date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 11 and 20 partners         14 (7.7%)         7 (4.6%)           Between 21 and 30 partners         4 (2.2%)         2 (1.3%)           Between 31 and 40 partners         1 (0.5%)         n/a           Experienced non-consensual sexual contact prior to 16         7 (2.8%)         15 (9.9%)           No         231 (92.8%)         135 (88.8%) </td <td>Not sure</td> <td>5 (2.0%)</td> <td>1 (0.7%)</td>	Not sure	5 (2.0%)	1 (0.7%)
Homosexual         14 (5.7%)         3 (2.0%)           Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         TS         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)         10.2%	Sexual Orientation		
Bisexual         n/a         8 (5.3%)           Pansexual         1 (0.4%)         3 (2.0%)           Bi-curious         n/a         1 (0.6%)           Relationship Status         3 (2.0%)           Single         142 (56.6%)         73 (48.0%)           Dating         48 (19.3%)         21 (13.8%)           In a relationship         50 (20.1%)         49 (32.2%)           Married / Common-law         7 (2.8%)         8 (5.3%)           Separated / Divorced         n/a         1 (0.7%)           Sex Partners to Date         34 (18.6%)         35 (23.0%)           Between 1 and 10 partners         126 (68.9%)         85 (55.9%)           Between 1 and 20 partners         14 (7.7%)         7 (4.6%)           Between 21 and 30 partners         4 (2.2%)         2 (1.3%)           Between 31 and 40 partners         1 (0.5%)         n/a           More than 41 partners         4 (2.2%)         n/a           Experienced non-consensual sexual contact prior to 16         7 (2.8%)         15 (9.9%)           No         231 (92.8%)         135 (88.8%)	Heterosexual	228 (92.3%)	136 (89.5%)
Pansexual Bi-curious       1 (0.4%)       3 (2.0%)         Bi-curious       n/a       1 (0.6%)         Relationship Status       3 (2.0%)         Single Dating Hair Single Dating Dating In a relationship In a relationship Status In a relationship In a relationship Status In a relationship In In a relationship In a relationship In a relationship In a relati	Homosexual	14 (5.7%)	3 (2.0%)
Bi-curious       n/a       1 (0.6%)         Relationship Status       142 (56.6%)       73 (48.0%)         Single       142 (56.6%)       73 (48.0%)         Dating       48 (19.3%)       21 (13.8%)         In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       Value       35 (23.0%)         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Bisexual	n/a	8 (5.3%)
Relationship Status         Single       142 (56.6%)       73 (48.0%)         Dating       48 (19.3%)       21 (13.8%)         In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       Ves       35 (23.0%)         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Pansexual	1 (0.4%)	3 (2.0%)
Single       142 (56.6%)       73 (48.0%)         Dating       48 (19.3%)       21 (13.8%)         In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Bi-curious	n/a	1 (0.6%)
Dating       48 (19.3%)       21 (13.8%)         In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Relationship Status		
In a relationship       50 (20.1%)       49 (32.2%)         Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       34 (18.6%)       35 (23.0%)         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Single	142 (56.6%)	73 (48.0%)
Married / Common-law       7 (2.8%)       8 (5.3%)         Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       34 (18.6%)       35 (23.0%)         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Dating	48 (19.3%)	21 (13.8%)
Separated / Divorced       n/a       1 (0.7%)         Sex Partners to Date       34 (18.6%)       35 (23.0%)         No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	In a relationship	50 (20.1%)	49 (32.2%)
Sex Partners to Date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Married / Common-law	7 (2.8%)	
No sex partners to date       34 (18.6%)       35 (23.0%)         Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       T (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Separated / Divorced	n/a	1 (0.7%)
Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Sex Partners to Date		
Between 1 and 10 partners       126 (68.9%)       85 (55.9%)         Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	No sex partners to date	34 (18.6%)	35 (23.0%)
Between 11 and 20 partners       14 (7.7%)       7 (4.6%)         Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	-	` '	• • • • • • • • • • • • • • • • • • • •
Between 21 and 30 partners       4 (2.2%)       2 (1.3%)         Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	Between 11 and 20 partners	* *	
Between 31 and 40 partners       1 (0.5%)       n/a         More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	-	• • • • • • • • • • • • • • • • • • • •	, ,
More than 41 partners       4 (2.2%)       n/a         Experienced non-consensual sexual contact prior to 16       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	1	` /	` ′
Experienced non-consensual sexual contact prior to 16  Yes 7 (2.8%) 15 (9.9%)  No 231 (92.8%) 135 (88.8%)	<u> </u>	` '	
contact prior to 16       Yes       7 (2.8%)       15 (9.9%)         No       231 (92.8%)       135 (88.8%)	±	. (2.270)	11/ 4
Yes 7 (2.8%) 15 (9.9%) No 231 (92.8%) 135 (88.8%)			
No 231 (92.8%) 135 (88.8%)		7 (2.8%)	15 (9 9%)
			, ,
	Not sure	7 (2.8%)	1 (0.7%)

Given non-consensual sexual contact		
prior to 16		
Yes	3 (1.2%)	2 (1.3%)
No	238 (97.1%)	148 (97.4%)
Not sure	4 (1.6%)	2 (1.3%)
Experienced non-consensual sexual		
contact after 16		
Yes	35 (14.2%)	31 (20.4%)
No	204 (82.9%)	120 (78.9%)
Not sure	4 (1.6%)	1 (0.7%)
Given non-consensual sexual contact		
given after 16		
Yes	25 (10.1%)	7 (4.6%)
No	216 (87.1%)	142 (93.4%)
Not sure	4 (1.6%)	1 (0.7%)
Sex play		
With female peer(s)	23 (9.3%)	7 (4.6%)
With male peer(s)	10 (4.0%)	12 (7.9%)
With both male and female peers	9 (3.6%)	6 (3.9%)
No	201 (81.0%)	127 (83.6%)

Table 4
Summary of Pearson r Intercorrelations Among the Explicit Measures (n = 243)

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. BIS Total	1.00											
2. I <sub>7</sub> Vent	.20**	1.00										
3. I <sub>7</sub> Imp 4. Hostile	.67**	.27**	1.00									
Outlook 5. Anger	.13*	-0.07	0.08	1.00								
Situations 6. RAPE	-0.01	-0.12	0.06	.62**	1.00							
scale 7. MOLEST	0.12	0.01	0.11	.20**	0.10	1.00						
scale 8. SRP	.14*	0.09	0.12	0.07	0.03	.57**	1.00					
Affective 9. SRP	.30**	.18**	.31**	.36**	.24**	.38**	.33**	1.00				
Interpersonal 10. SRP	.27**	.19**	.31**	.37**	.26**	.44**	.35**	.73**	1.00			
Lifestyle 11. SRP	.50**	.40**	.53**	.27**	.18**	.21**	.17**	.60**	.62**	1.00		
Antisocial	.32**	.19**	.41**	0.07	-0.03	.23**	.21**	.47**	.49**	.48**	1.00	
12. NPI-16	0.06	.21**	.22**	.24**	.19**	.27**	.17**	.34**	.40**	.34**	.22**	1.00

*Note:* BIS = Barratt Impulsiveness Scale;  $I_7$  Imp = Eysenck's Impulsiveness Questionnaire – Impulsivity subscales;  $I_7$  Vent = Eysenck's Impulsivity Questionnaire – Venturesomeness subscale; MAI Hostile Outlook = Multidimensional Anger Inventory, Hostile Outlook subscale; MAI Anger Situations = Multidimensional Anger Inventory, Anger Situations subscale; SRP Affective = Self Report Psychopathy, Affective facet; SRP Interpersonal = Self Report Psychopathy, Interpersonal facet; SRP Lifestyle = Self Report Psychopathy, Lifestyle facet; SRP Antisocial = Self Report Psychopathy, Antisocial facet; NPI-16 = Narcissistic Personality Inventory – 16 items. \*p < .05; \*\*p < .01.

Table 5

Pattern Matrix for the Four-Component Solution with a Promax Rotation (power 2.5)

		Compone	ents	
Variables	1	2	3	4
BIS	0.95	-0.01	-0.01	-0.20
I <sub>7</sub> Imp	0.87	-0.08	-0.01	0.02
SRP Lifestyle	0.54	0.00	0.16	0.45
SRP Antisocial	0.45	0.26	-0.12	0.25
MOLEST Total	0.00	0.90	-0.18	-0.07
RAPE Total	-0.05	0.88	0.00	-0.05
SRP Interpersonal	0.19	0.40	0.27	0.38
SRP Affective	0.25	0.36	0.28	0.32
MAI Anger Situations	-0.06	-0.13	0.92	-0.06
MAI Hostile Outlook	0.05	-0.03	0.88	-0.03
I <sub>7</sub> Vent	0.09	-0.21	-0.34	0.81
NPI-16	-0.21	0.09	0.19	0.70

Note: Salient loadings are marked in bold. BIS = Barratt Impulsiveness Scale; I<sub>7</sub> Imp = Eysenck's Impulsiveness Questionnaire – Impulsiveness subscales; SRP Lifestyle = Self Report Psychopathy, Lifestyle facet; SRP Antisocial = Self Report Psychopathy, Antisocial facet; SRP Interpersonal = Self Report Psychopathy, Interpersonal facet; SRP Affective = Self Report Psychopathy, Affective facet; MAI Anger Situations = Multidimensional Anger Inventory, Anger Situations subscale; MAI Hostile Outlook = Multidimensional Anger Inventory, Hostile Outlook subscale; I<sub>7</sub> Vent = Eysenck's Impulsivity Questionnaire – Venturesomeness subscale; NPI-16 = Narcissistic Personality Inventory – 16 items.

Table 6

Structure Matrix for the Four-Component Solution with a Promax Rotation (power 2.5)

		Compone	ents	
Variables	1	2	3	4
BIS	0.87	0.15	0.08	0.15
I <sub>7</sub> Imp	0.85	0.13	0.10	0.32
SRP Lifestyle	0.72	0.31	0.35	0.68
SRP Antisocial	0.59	0.41	0.08	0.47
RAPE Total	0.14	0.85	0.24	0.20
MOLEST Total	0.16	0.82	0.06	0.16
MAI Hostile Outlook	0.46	0.64	0.51	0.64
MAI Anger Situations	0.49	0.60	0.50	0.59
NPI-16	0.16	0.22	0.87	0.19
I <sub>7</sub> Vent	0.03	0.11	0.86	0.10
SRP Interpersonal	0.29	-0.04	-0.19	0.70
SRP Affective	0.10	0.31	0.35	0.70

Note: BIS = Barratt Impulsiveness Scale; I<sub>7</sub> Imp = Eysenck's Impulsiveness Questionnaire – Impulsivity subscale; SRP Lifestyle = Self Report Psychopathy, Lifestyle facet; SRP Antisocial = Self Report Psychopathy, Antisocial facet; MAI Anger Situations = Multidimensional Anger Inventory, Anger Situations subscale; MAI Hostile Outlook = Multidimensional Anger Inventory, Hostile Outlook subscale; NPI-16 = Narcissistic Personality Inventory – 16 items; I<sub>7</sub> Vent = Eysenck's Impulsivity Questionnaire – Venturesomeness subscale; SRP Interpersonal = Self Report Psychopathy, Interpersonal facet; SRP Affective = Self Report Psychopathy, Affective facet.

Table 7

Component Correlation Matrix

Component	1	2	3	4
1. Impulsivity	1.00			
2. Offense-Supportive Cognitions	0.24	1.00		
3. Anger	0.15	0.29	1.00	
4. Surgent Narcissism	0.37	0.31	0.24	1.00

Table 8
Summary of Pearson r Intercorrelations Among the Implicit Measures

1	2	3	4	5	6
1.00					
.68**	1.00				
.53**	.43**	1.00			
.43**	.43**	.51**	1.00		
0.00	0.01	-0.01	0.03	1.00	
17*	16*	17*	-0.07	.16*	1.00
	.68** .53** .43** 0.00	1.00  .68** 1.00  .53** .43**  .43** .43**  0.00 0.01 17*16*	1.00  .68** 1.00  .53** .43** 1.00  .43** .43** .51** 0.00 0.01 -0.01 17*16*17*	1.00  .68** 1.00  .53** .43** 1.00  .43** .43** .51** 1.00  0.00 0.01 -0.01 0.03 17*16*17* -0.07	1.00  .68** 1.00  .53** .43** 1.00  .43** .43** .51** 1.00  0.00 0.01 -0.01 0.03 1.00 17*16*17* -0.07 .16*

*Note:* VT – Sadomasochism = Viewing Time Task – Sexual interest in Sadomasochism; VT – Pedophilia = Viewing Time Task – Sexual Interest in Pedophilia; CSA-IAT = Child-Sex IAT; RE-IAT = Rape Evaluation IAT. \* p < .05; \*\*p < .01.

Table 9

Pattern Matrix for the Four-Component Solution with a Promax Rotation (power of 2)

Variables	1	2	3	4
Square Root VT-				
Sadomasochism, Woman "Sub"	0.91	0.04	0.01	0.01
Square Root VT-				
Sadomasochism, Woman "Dom"	0.84	0.14	-0.01	-0.01
VT-Pedophilia, Child Female	0.04	0.88	0.07	0.01
VT-Pedophilia, Child Male	0.16	0.75	-0.10	-0.01
RE-IAT	-0.01	-0.01	0.99	0.01
CSA-IAT	0.00	0.00	0.01	1.00

*Note:* Salient loadings are marked in bold. VT – Sadomasochism = Viewing Time Task – Sexual interest in Sadomasochism; VT – Pedophilia = Viewing Time Task – Sexual Interest in Pedophilia; CSA-IAT = Child-Sex IAT; RE-IAT = Rape Evaluation IAT

Table 10

Structure Matrix for the Four-Component Solution with a Promax Rotation (power of 2)

Variables	1	2	3	4
Square Root VT-				
Sadomasochism, Woman "Sub"	0.92	0.41	-0.15	0.01
Square Root VT-				
Sadomasochism, Woman "Dom"	0.90	0.49	-0.17	-0.01
VT-Pedophilia, Child Female	0.39	0.89	-0.03	0.03
VT-Pedophilia, Child Male	0.49	0.83	-0.21	-0.01
RE-IAT	-0.18	-0.11	1.00	0.15
CSA-IAT	0.00	0.02	0.15	1.00

*Note:* VT – Sadomasochism = Viewing Time Task – Sexual interest in Sadomasochism; VT – Pedophilia = Viewing Time Task – Sexual Interest in Pedophilia; CSA-IAT = Child-Sex IAT; RE-IAT = Rape Evaluation IAT

Table 11

Component Correlation Matrix

Component	1	2	3	4
1. Interest in Sadomasochistic Images	1.00			
2. Interest in Pictures of Children	0.42	1.00		
3. Positive Evaluation of Rape	-0.17	-0.10	1.00	
4. Interest in Pedophilia	0.00	0.02	0.15	1.00

Table 12

Descriptive Statistics for 175 Male Participants

Variables	Mean	Median	SD	Skewness	Kurtosis
Control Variables					
Balanced Inventory of Desirable					
Responding	82.94	82.21	16.64	0.25	0.22
Pornography Use	30.49	30.00	7.84	0.49	0.10
Sexual Compulsivity Scale	14.98	14.00	4.67	1.28	1.22
Predictor Variables					
Multidimensional Assessment of Sex and					
Aggression – Fantasy Index	17.50	10.00	19.10	1.33	1.32
Interest in Sadomasochistic Images	0.13	0.04	0.93	0.71	0.98
Interest in Pictures of Children	0.12	-0.11	1.00	0.80	0.55
Positive Evaluation of Rape	-0.01	-0.14	0.95	1.05	1.53
Interest in Pedophilia	-0.06	-0.16	0.87	0.46	0.04
Moderator Variables					
Impulsivity	-0.09	-0.22	0.99	0.60	0.33
Offense-Supportive Cognitions	0.00	-0.19	0.97	0.89	0.49
Anger	0.10	0.05	1.05	0.08	-0.39
Surgent Narcissism	0.00	-0.11	1.04	0.21	-0.07
Outcome Variables					
Square Root Transformed					
Multidimensional Assessment of Sex and					
Aggression – Behaviour Index	1.28	1.41	1.27	0.67	-0.41
Rape Proclivity subscale	16.48	10.00	9.49	1.35	0.59
Square Root Transformed Interest in					
Child Molestation Proclivity subscale	3.52	3.16	0.68	2.34	5.32

Table 13

Moderated Multiple Regression Model for the MASA – Behaviour Index

Blo ck	R	$R^2$	Variables Entered	b	SE b	β	t	p	95% LL	95% UL
1	0.57	0.33	(Constant)	1.28	0.08		16.05	0.00	1.13	1.44
			BIDR	0.01	0.01	0.07	0.99	0.32	-0.01	0.02
			Pornography Use	0.07	0.01	0.40	5.71	0.00	0.04	0.09
			SCS	0.07	0.02	0.24	3.46	0.00	0.03	0.11
2	0.74	0.55	(Constant)	1.28	0.07		19.19	0.00	1.15	1.42
			BIDR	0.00	0.01	0.00	0.01	1.00	-0.01	0.01
			Pornography Use	0.03	0.01	0.20	2.88	0.01	0.01	0.06
			SCS	0.02	0.02	0.08	1.27	0.21	-0.02	0.07
			MASA – Fantasy Index Interest in Sadomasochistic	0.03	0.01	0.48	6.85	0.00	0.02	0.05
			Images Interest in Pictures of	0.17	0.08	0.13	2.06	0.04	-0.02	0.36
			Children Positive Evaluation of	-0.04	0.08	-0.03	-0.54	0.59	-0.22	0.15
			Rape	0.00	0.07	0.00	0.01	0.99	-0.13	0.17
			Interest in Pedophilia	-0.16	0.08	-0.11	-2.02	0.05	-0.34	0.00
			Impulsivity Offense-Supportive	0.09	0.09	0.07	1.04	0.30	-0.10	0.26
			Cognitions	0.21	0.08	0.16	2.47	0.02	0.03	0.39
			Anger	-0.14	0.08	-0.11	-1.79	0.08	-0.28	0.00
			Surgent Narcissism	-0.08	0.08	-0.06	-0.97	0.34	-0.22	0.08
3	0.81	0.65	(Constant)	1.27	0.08		16.17	0.00	1.08	1.45
			BIDR	0.01	0.01	0.07	0.91	0.36	-0.01	0.02
			Pornography Use	0.03	0.01	0.17	2.46	0.02	0.00	0.05
			SCS MASA – Fantasy	0.02	0.02	0.09	1.26	0.21	-0.02	0.07
			Index Interest in Sadomasochistic	0.03	0.01	0.47	6.37	0.00	0.02	0.05
			Images Interest in Pictures of	0.09	0.09	0.07	1.03	0.31	-0.12	0.28
			Children Positive Evaluation of	-0.03	0.08	-0.03	-0.42	0.67	-0.21	0.15
			Rape	0.07	0.07	0.05	0.95	0.34	-0.09	0.27
			Interest in Pedophilia	-0.19	0.08	-0.13	-2.30	0.02	-0.36	-0.03
			Impulsivity Offense-Supportive	0.10	0.09	0.08	1.10	0.27	-0.11	0.28
			Cognitions	0.26	0.09	0.20	3.00	0.00	0.04	0.47
			Anger	-0.10	0.08	-0.09	-1.28	0.20	-0.27	0.07
			Surgent Narcissism	-0.11	0.08	-0.09	-1.38	0.17	-0.29	0.07

	MASA – Fantasy							
	Index x Impulsivity	0.01	0.00	0.08	1.18	0.24	-0.01	0.01
	MASA – Fantasy							
	Index x Offense-							
	Supportive Cognitions	0.00	0.00	-0.01	-0.20	0.84	-0.01	0.01
	MASA – Fantasy							
	Index x Anger	-0.01	0.00	-0.16	-2.34	0.02	-0.02	0.00
	MASA – Fantasy							
	Index x Surgent							
	Narcissism	0.00	0.01	0.04	0.60	0.55	-0.01	0.01
	Interest in							
	Sadomasochistic							
	Images x Impulsivity	0.13	0.10	0.10	1.31	0.19	-0.09	0.39
	Interest in							
	Sadomasochistic							
	Images x Offense-							
	Supportive Cognitions	0.16	0.10	0.12	1.56	0.12	-0.08	0.38
	Interest in							
	Sadomasochistic							
	Images x Anger	-0.10	0.10	-0.08	-1.00	0.32	-0.28	0.13
	Interest in							
	Sadomasochistic							
	Images x Surgent							
	Narcissism	-0.08	0.10	-0.06	-0.82	0.41	-0.34	0.13
	Interest in Pictures of							
	Children x Impulsivity	-0.06	0.09	-0.04	-0.64	0.53	-0.27	0.12
	Interest in Pictures of							
	Children x Offense-	0.00	0.00	0.05	0.00	0.26	0.15	0.22
	Supportive Cognitions	0.09	0.09	0.07	0.92	0.36	-0.17	0.32
	Interest in Pictures of	0.06	0.00	0.05	0.60	0.40	0.20	0.15
	Children x Anger	-0.06	0.08	-0.05	-0.69	0.49	-0.29	0.15
	Interest in Pictures of							
	Children x Surgent	0.00	0.00	0.00	0.01	0.00	0.10	0.22
	Narcissism	0.00	0.08	0.00	-0.01	0.99	-0.19	0.22
	Positive Evaluation of	0.02	0.00	0.02	0.20	0.70	0.22	0.10
	Rape x Impulsivity	-0.03	0.09	-0.02	-0.28	0.78	-0.23	0.19
	Positive Evaluation of							
	Rape x Offense-	0.00	0.00	0.00	0.02	0.00	0.22	0.22
	Supportive Cognitions	0.00	0.09	0.00	-0.03	0.98	-0.22	0.22
	Positive Evaluation of	0.10	0.00	0.14	2.24	0.02	0.00	0.40
	Rape x Anger	0.19	0.09	0.14	2.24	0.03	0.00	0.40
	Positive Evaluation of							
	Rape x Surgent	0.02	0.00	0.01	0.10	0.06	0.10	0.21
	Narcissism	0.02	0.09	0.01	0.18	0.86	-0.18	0.21
	Interest in Pedophilia	0.16	0.00	0.12	1.00	0.06	0.24	0.02
	x Impulsivity	-0.16	0.08	-0.12	-1.88	0.06	-0.34	0.02
	Interest in Pedophilia							
	x Offense-Supportive	0.02	0.10	0.02	0.20	0.70	0.22	0.24
	Cognitions	0.03	0.10	0.02	0.28	0.78	-0.23	0.24
	Interest in Pedophilia	0.17	0.00	0.12	2.00	0.49	0.40	0.01
	x Anger	-0.17	0.09	-0.12	-2.00	.048	-0.40	0.01
	Interest in Pedophilia	0.07	0.10	0.04	0.64	0.53	0.14	0.25
-	x Surgent Narcissism	0.07	0.10	0.04	0.64	0.52	-0.14	0.25

Note: LL = Lower Limit; UL = Upper Limit

Table 14

Moderated Multiple Regression Model for Rape Proclivity

Blo ck	R	$R^2$	Variables Entered	b	SE b	β	t	p	95% LL	95% UL
1	0.36	0.13	(Constant)	16.48	0.68		24.41	0.00	15.10	17.79
			BIDR	0.07	0.04	0.13	1.67	0.10	-0.01	0.17
			Pornography Use	0.07	0.10	0.06	0.73	0.47	-0.13	0.25
			SCS	0.55	0.16	0.27	3.44	0.00	0.20	0.93
2	0.64	0.41	(Constant)	16.48	0.57		28.80	0.00	15.29	17.65
			BIDR	0.04	0.05	0.07	0.86	0.39	-0.05	0.13
			Pornography Use	0.03	0.10	0.02	0.25	0.80	-0.16	0.21
			SCS MASA – Fantasy	0.26	0.16	0.13	1.70	0.09	-0.06	0.62
			Index Interest in Sadomasochistic	0.03	0.04	0.07	0.84	0.40	-0.04	0.12
			Images Interest in Pictures of	-0.12	0.71	-0.01	-0.17	0.87	-1.57	1.29
			Children Positive Evaluation of	0.30	0.67	0.03	0.44	0.66	-1.01	1.54
			Rape	0.61	0.62	0.06	0.99	0.33	-0.48	1.93
			Interest in Pedophilia	-0.11	0.70	-0.01	-0.16	0.88	-1.52	1.20
			Impulsivity Offense-Supportive	-0.04	0.76	0.00	-0.06	0.96	-1.67	1.27
			Cognitions	5.35	0.71	0.55	7.51	0.00	3.55	6.88
			Anger	-0.42	0.65	-0.05	-0.64	0.52	-1.71	0.78
			Surgent Narcissism	-0.08	0.67	-0.01	-0.13	0.90	-1.37	1.20
3	0.69	0.47	(Constant)	16.87	0.72		23.52	0.00	15.28	18.58
			BIDR	0.04	0.05	0.07	0.80	0.42	-0.06	0.15
			Pornography Use	0.07	0.11	0.06	0.66	0.51	-0.10	0.29
			SCS MASA – Fantasy	0.30	0.17	0.15	1.70	0.09	-0.09	0.77
			Index Interest in Sadomasochistic	0.05	0.05	0.10	1.15	0.25	-0.04	0.16
			Images Interest in Pictures of	-0.42	0.80	-0.04	-0.53	0.60	-2.06	1.58
			Children Positive Evaluation of	0.35	0.74	0.04	0.48	0.64	-1.24	2.18
			Rape Interest in Pedanhilia	0.85 -0.32	0.67	0.09	1.26	0.21	-0.50	2.51
			Interest in Pedophilia Impulsivity	-0.32 -0.15	0.74 0.80	-0.03 -0.02	-0.43 -0.18	0.67 0.86	-2.04 -2.04	1.18 1.51
			Offense-Supportive Cognitions	5.41	0.78	0.56	6.95	0.00	3.26	7.08
			Anger	-0.40	0.74	-0.04	-0.54	0.59	-2.25	1.07
			Surgent Narcissism	-0.25	0.70	-0.03	-0.36	0.72	-1.96	1.30
			MASA – Fantasy	-0.01	0.04	-0.01	-0.12	0.90	-0.08	0.11

Index	x x Impulsivity							
	SA – Fantasy							
	x x Offense-							
	ortive Cognitions	0.00	0.03	0.00	0.00	1.00	-0.11	0.09
	SA – Fantasy							
	x x Anger	0.01	0.04	0.02	0.27	0.79	-0.08	0.10
	SA – Fantasy							
	x x Surgent							
	issism	-0.08	0.04	-0.16	-1.79	0.08	-0.19	0.03
	est in							
	masochistic							
	es x Impulsivity	0.27	0.91	0.03	0.30	0.77	-1.90	2.23
	est in							
	masochistic							
	es x Offense-							
	ortive Cognitions	0.05	0.92	0.01	0.06	0.95	-1.95	2.40
	est in							
	masochistic							
	es x Anger	-0.25	0.87	-0.03	-0.28	0.78	-2.03	1.61
	est in							
	masochistic							
	es x Surgent	0.0.	0.00	0.01	0.06	0.05	1.50	1.04
	issism	0.05	0.88	0.01	0.06	0.95	-1.56	1.94
	est in Pictures of	0.26	0.70	0.02	0.22	0.75	1.02	1.60
	lren x Impulsivity	-0.26	0.79	-0.03	-0.32	0.75	-1.93	1.69
	est in Pictures of							
	lren x Offense-	0.44	0.04	0.05	0.52	0.60	1 41	2.10
	ortive Cognitions	0.44	0.84	0.05	0.52	0.60	-1.41	3.19
	est in Pictures of	0.00	0.72	0.01	0.12	0.00	1 22	1 75
	lren x Anger	0.09	0.73	0.01	0.13	0.90	-1.32	1.75
	est in Pictures of							
	lren x Surgent issism	-0.12	0.76	-0.01	-0.16	0.07	-2.37	1.51
	ive Evaluation of	-0.12	0.76	-0.01	-0.16	0.87	-2.37	1.51
		0.50	0.05	0.05	0.50	0.56	1 5 1	2.20
	x Impulsivity ive Evaluation of	0.50	0.85	0.05	0.59	0.56	-1.51	2.30
	x Offense-							
	ortive Cognitions	-0.41	0.83	-0.04	-0.50	0.62	-2.37	1.87
1.1	ive Evaluation of	-0.41	0.83	-0.04	-0.50	0.02	-2.37	1.67
	x Anger	1.14	0.79	0.11	1.45	0.15	-0.94	2.66
	ive Evaluation of	1.14	0.79	0.11	1.43	0.13	-0.94	2.00
	x Surgent							
	issism	-0.42	0.78	-0.04	-0.54	0.59	-2.48	1.19
	est in Pedophilia	-0.42	0.76	-0.04	-0.54	0.57	-2.40	1.17
	pulsivity	1.53	0.77	0.15	1.98	.049	0.22	3.42
	est in Pedophilia	1.55	0.77	0.13	1.70	.077	0.22	5.72
	fense-Supportive							
	nitions	-0.87	0.87	-0.08	-0.99	0.32	-3.70	0.65
	est in Pedophilia	0.07	0.07	0.00	0.77	0.52	5.70	0.05
x An		0.40	0.77	0.04	0.52	0.60	-1.15	2.01
	est in Pedophilia	0.10	· · · · ·	0.01	0.02	0.00	1.10	
	gent Narcissism	-0.63	0.92	-0.05	-0.68	0.50	-2.24	1.37
A Dui			V.72	0.00	0.00	0.00		

Note: LL = Lower Limit; UL = Upper Limit

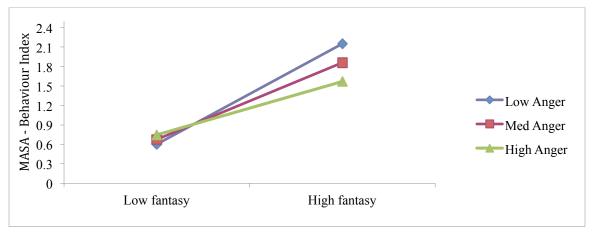
Table 15

Moderated Multiple Regression Model for Interest in Child Molestation Proclivity

Blo ck	R	$R^2$	Variables Entered	b	SE b	β	t	p	95% LL	95% UL
1	0.37	0.14	(Constant)	3.52	0.05		73.60	0.00	3.44	3.61
			BIDR	0.01	0.00	0.19	2.49	0.01	0.00	0.02
			Pornography Use	-0.01	0.01	-0.09	-1.14	0.26	-0.02	0.01
			SCS	0.04	0.01	0.31	3.92	0.00	0.02	0.07
2	0.62	0.39	(Constant)	3.52	0.04		85.01	0.00	3.45	3.61
			BIDR	0.00	0.00	0.06	0.72	0.47	-0.01	0.01
			Pornography Use	-0.01	0.01	-0.09	-1.13	0.26	-0.02	0.01
			SCS	0.02	0.01	0.12	1.50	0.14	-0.01	0.04
			MASA – Fantasy Index Interest in	0.00	0.00	0.05	0.59	0.55	0.00	0.01
			Sadomasochistic Images Interest in Pictures of	0.06	0.05	0.08	1.17	0.24	-0.06	0.20
			Children Positive Evaluation of	0.00	0.05	0.00	0.03	0.98	-0.11	0.10
			Rape	-0.01	0.05	-0.02	-0.29	0.77	-0.09	0.09
			Interest in Pedophilia	-0.02	0.05	-0.02	-0.31	0.76	-0.10	0.07
			Impulsivity Offense-Supportive	0.12	0.06	0.17	2.10	0.04	0.00	0.23
			Cognitions	0.34	0.05	0.49	6.66	0.00	0.19	0.49
			Anger	-0.02	0.05	-0.02	-0.32	0.75	-0.12	0.08
			Surgent Narcissism	-0.07	0.05	-0.10	-1.36	0.18	-0.17	0.04
3	0.72	0.52	(Constant)	3.53	0.05	0.04	72.22	0.00	3.42	3.64
			BIDR	0.00	0.00	0.04	0.45	0.65	-0.01	0.01
			Pornography Use	0.00	0.01	-0.02	-0.28	0.78	-0.02	0.02
			SCS MASA – Fantasy Index	0.00	0.01	0.03	0.38	0.71	-0.02	0.04
			Interest in Sadomasochistic Images	0.01	0.00	0.14	0.69	0.12	0.00	0.01
			Interest in Pictures of Children	0.00	0.05	0.00	-0.03	0.98	-0.12	0.14
			Positive Evaluation of Rape	0.02	0.05	0.03	0.51	0.61	-0.08	0.13
			Interest in Pedophilia	-0.05	0.05	-0.06	-0.98	0.33	-0.08	0.13
			Impulsivity Offense-Supportive	0.10	0.06	0.15	1.80	0.07	-0.13	0.24
			Cognitions	0.37	0.05	0.53	6.95	0.00	0.19	0.52
			Anger	-0.01	0.05	-0.01	-0.17	0.87	-0.14	0.10
			Surgent Narcissism	-0.07	0.05	-0.11	-1.48	0.14	-0.18	0.05
			MASA – Fantasy	0.00	0.00	0.05	0.59	0.55	0.00	0.01

In day Invested							
Index x Impulsiv	•						
MASA – Fantas	y						
Index x Offense	_						
Supportive Cogn		0.00	-0.12	-1.58	0.12	-0.01	0.01
MASA – Fantas							
Index x Anger	0.00	0.00	0.12	1.52	0.13	0.00	0.01
MASA – Fantas	y						
Index x Surgent							
Narcissism	-0.01	0.00	-0.18	-2.12	0.04	-0.02	0.00
Interest in							
Sadomasochistic							
Images x Impuls	sivity 0.20	0.06	0.27	3.15	0.00	-0.03	0.34
Interest in							
Sadomasochistic							
Images x Offens							
Supportive Cogn	nitions 0.09	0.06	0.13	1.51	0.14	-0.08	0.25
Interest in							
Sadomasochistic							
Images x Anger	-0.09	0.06	-0.14	-1.55	0.12	-0.24	0.05
Interest in							
Sadomasochistic							
Images x Surger							
Narcissism	-0.06	0.06	-0.10	-1.06	0.29	-0.19	0.07
Interest in Pictur							
Children x Impu		0.05	-0.15	-1.93	0.06	-0.22	0.09
Interest in Pictur							
Children x Offer							
Supportive Cogn		0.06	-0.16	-1.75	0.08	-0.25	0.09
Interest in Pictur							
Children x Ange		0.05	0.12	1.46	0.15	-0.03	0.19
Interest in Pictur							
Children x Surgo							
Narcissism	0.08	0.05	0.13	1.60	0.11	-0.06	0.18
Positive Evaluat							
Rape x Impulsiv		0.06	-0.07	-0.93	0.35	-0.18	0.12
Positive Evaluat							
Rape x Offense-							
Supportive Cogn		0.06	0.01	0.15	0.88	-0.17	0.18
Positive Evaluat							
Rape x Anger	0.03	0.05	0.05	0.62	0.54	-0.13	0.14
Positive Evaluat	ion of						
Rape x Surgent							
Narcissism	-0.02	0.05	-0.03	-0.42	0.67	-0.14	0.09
Interest in Pedor							
x Impulsivity	0.05	0.05	0.07	0.93	0.35	-0.09	0.17
Interest in Pedop							
x Offense-Suppo						_	
Cognitions	0.15	0.06	0.18	2.45	0.02	-0.07	0.30
Interest in Pedor				0			
x Anger	-0.03	0.05	-0.04	-0.50	0.62	-0.14	0.17
Interest in Pedop							
x Surgent Narcis	ssism -0.07	0.06	-0.08	-1.09	0.28	-0.21	0.09

Note: LL = Lower Limit; UL = Upper Limit



*Figure 1.* Regression of MASA – Behaviour Index on the MASA – Fantasy Index at Three Levels of Anger.

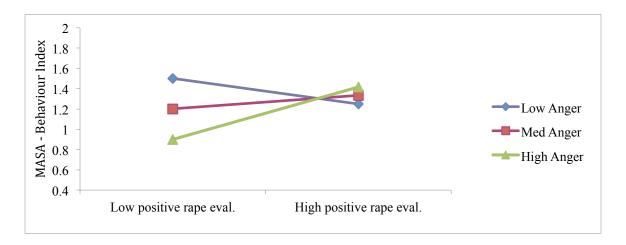


Figure 2. Regression of MASA – Behaviour Index on Positive Evaluation Rape at Three Levels of Anger.

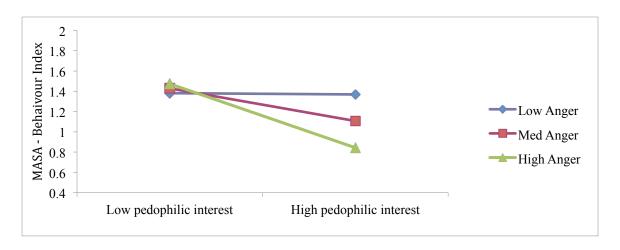


Figure 3. Regression of MASA – Behaviour Index on Interest in Pedophilia at Three Levels of Anger.

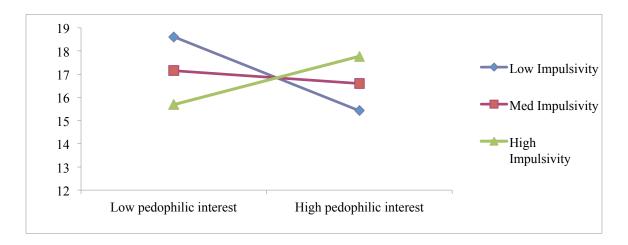
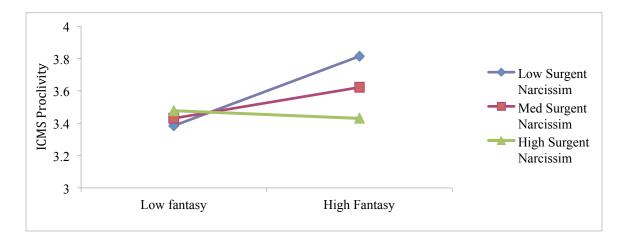
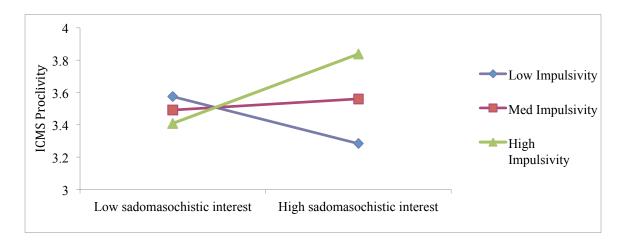


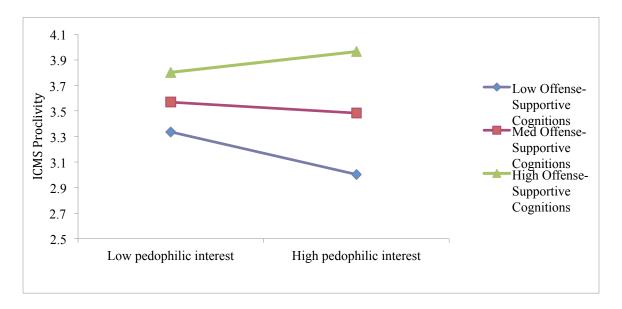
Figure 4. Regression of Rape Proclivity on Interest in Pedophilia at Three Levels of Impulsivity.



*Figure 5.* Regression of Child Molestation Proclivity on MASA – Fantasy Index at Three Levels of Surgent Narcissism.



*Figure 6.* Regression of Child Molestation Proclivity on Interest in Sadomasochism at Three Levels of Impulsivity.



*Figure 7.* Regression of Child Molestation Proclivity on Interest in Pedophilia at Three Levels of Offense-Supportive Cognitions.

## **APPENDICES**

## Appendix A

### **General Instructions**

Please complete this survey alone in a quiet place where you are able to concentrate fully. Take as many breaks as you need but be sure to save your answers by clicking on the 'Save and continue later' button at the end of every survey page.

Read all instructions carefully before answering any questions. Please answer the questions as honestly as possible. Note that there is no BACK button; you cannot go backward in the study.

## **Demographic Information**

1. Age: _							
2. Biolog	gical ser	χ.					
O Male		Fem	nale				
O Ware		7 1 011	iaic				
3. What	is your	ethnic	c background	? Chec	k all that ap	ply.	
O White			O African C	'anadia	ın 🛮 O Hisp	anic/Latino	O East Asian
O South	Asian		O Middle Ea	astern	O Paci	fic Islander	O Native Canadian
O Other:	please						
specify_							
4. What	is your	gende	er?				
O Male		ΟF	emale emale	O Tra	ansgender	O Other	O Prefer not to say
	•		al orientation? Iomosexual	)	sexual	O Other	O Prefer not to say
O Hetelo	Sexuai	<b>O</b> 1.	lomosexuai	O Bi	Sexuai	O Other	O Fleter flot to say
6. Relati	onship :	status	:				
O Single			O Dating	g	O In a		O Married/common
					relationship	cohabiting/	law
O Separa	ted/divo	orced	O Wido	wed	O Prefer no	t to say	
7. Numb	er of se	xual <sub>I</sub>	partners to da	te:	O Pr	refer not to say	y
8. Have	you eve	r bee	n diagnosed v	vith a r	osychiatric d	isorder?	
OYes	O No		O Not sure			efer not to say	,
9. Have you ever experienced non-consensual sexual contact or given sexual contact to someone 5 years older or more (when under age 16)?  Non-consensual sexual contact includes touching, feeling, kissing or petting parts of the body in a sexual manner, attempted or completed vaginal intercourse, attempted or completed oral and/or anal sex, or attempted or completed penetration by objects.							
O Yes	O No	(	O Not sure		O Pro	efer not to say	,
10. Have you ever experienced non-consensual sexual contact or given sexual contact by someone 5 years older or more (when under age 16)?  Non-consensual sexual contact includes touching, feeling, kissing or petting parts of the body in a sexual manner, attempted or completed vaginal intercourse, attempted or completed oral and/or anal sex, or attempted or completed penetration by objects.							
O Yes	O No		O Not sure			efer not to say	

11. Have you ever experienced non-consensual sexual contact or given sexual contact to someone (when over age 16)?

	Non-consensual sexual contact includes touching, feeling, kissing or petting parts of the					
bo	ody in a s	sexual manner, atte	empted or c	omplete	d vaginal intercou	irse, attempted or
CC	ompleted	oral and/or anal se	ex, or attem	pted or	completed penetra	ation by objects.
O Yes	O No	O Not sure		O Pre	fer not to say	
12. Have you ever experienced non-consensual sexual contact or given sexual contact by someone (when over age 16)?  Non-consensual sexual contact includes touching, feeling, kissing or petting parts of the body in a sexual manner, attempted or completed vaginal intercourse, attempted or completed oral and/or anal sex, or attempted or completed penetration by objects.  O Yes O No O Not sure O Prefer not to say  13. Did you engage in any sex play with peers before age 12? Sex play involves fondling, genital exposure, mutual masturbation, oral sex and sexual intercourse.  O Yes, sex play with female peers						
O Yes, so	ex play w	vith female peers				
O Yes, so	ex play w	vith male peers				
O Yes, so	ex play w	vith both male and				
female pe	eers					
O No						
O Prefer	not to sa	y				
14. Year	in univer	sity:				
First year	0	Second year O	Third year	r O	Fourth year O	More than 4 years O
15. Progr	am of stu	ndy (What is your	major?):			
16. Is En	glish you	r first language?				
Yes O No O If No, please indicate how long you've been speaking English for:						
17. Curre	nt emplo	yment status:				
Full-time	0	Part-time O	Unemp	oloyed	O Prefer not to	say O

The Multidimensional Assessment of Sex and Aggression (MASA; Knight et al., 1994) with added items from the Sexual Fantasy Questionnaire (SFQ; O'Donohue et al., 1997)

**GENERAL NOTE:** These items have been written to make it somewhat easier for all of them to accord with sexual orientation. Many times, there are options as to which word(s) is suitable. Therefore, as you read the items, focus on the option suited to your sex and sexual orientation, and ignore the unsuitable options. Thank you for your patience with this necessary feature.

PART 1 DIRECTIONS: People often have daydreams or fantasies and some people have sexual daydreams or fantasies. For each of the following possible daydreams or fantasies, rate how often it has occurred in your experience. If the answer is 'NEVER', just move on to the next item. But if your answer is 'ONCE', 'SOMETIMES', 'FAIRLY OFTEN', OR 'VERY OFTEN', then answer the second part of the question also. The second part asks how pleasant it was for you to have the daydream/fantasy at that time, '1 = VERY UNPLEASANT, '2 = UNPLEASANT', '3 = NEUTRAL', '4 = PLEASANT', or '5 = VERY PLEASANT'. Mark how felt at that time. If you can't remember, mark how you think you most likely felt.

I have daydreamed or fantasized about...

		Never (0)	Once (1 time)	Sometimes (2-10 times)	Fairly Often (11-50 times)	Very Often (50+ times)
1	Having a woman/ man or a girl/ boy in pain while I am having sex with her/ him.	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
2	Being raped	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
3	Tying someone up and having sex	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
4	Being hurt or injured during sex by my partner	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
5	Shocking a stranger by showing them my penis	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
6	Rubbing a boy's penis.	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5

7	Touching and kissing a boy/ girl.	0	0	0	0	0
0	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
8	Being bound (e.g. by rope, chains, handcuffs, gags, etc.) or otherwise made to suffer by my partner	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
9	How good it would feel to hurt someone during sex.	0	0	0	0	0
	How pleasant was it for you to have	1	2	3	4	5
10	the daydream/fantasy at that time? Being made to obey during sex	0	0	0	0	0
10	How pleasant was it for you to have		•	_	•	_
	the daydream/ fantasy at that time?	1	2	3	4	5
11	Masturbating or having sex with					
	someone while I was wearing	0	0	0	0	0
	women's clothing					
	How pleasant was it for you to have	1	2	3	4	5
10	the daydream/fantasy at that time?			_		
12	Making a woman/ man beg me to	0	0	0	0	0
	stop as I fuck her/ him up the ass  How pleasant was it for you to have					
	the daydream/fantasy at that time?	1	2	3	4	5
13	Having sex with a child.	0	0	0	0	0
	How pleasant was it for you to have	1	2	2	4	_
	the daydream/fantasy at that time?	1	2	3	4	5
14	Women's/ men's underwear.	0	0	0	0	0
	How pleasant was it for you to have	1	2	3	4	5
15	the daydream/fantasy at that time?					
15	Masturbating while people watch me.	0	0	0	0	0
	How pleasant was it for you to have					
	the daydream/ fantasy at that time?	1	2	3	4	5
16	Feet or footwear	0	0	0	0	0
	How pleasant was it for you to have	1	2	3	4	5
1.7	the daydream/fantasy at that time?	1	2	J	•	J
17	Getting raped or otherwise sexually abused when sleeping	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
18	Having a woman/ man tied to a bed spread-eagle.	0	0	0	0	0
	How pleasant was it for you to have	1	2	3	4	5
10	the daydream/fantasy at that time?					_
19	Secretly watching people having	0	0	0	0	0

	sex.					
20	Threatening or frightening a man/ woman.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
21	having someone humiliate me during sex	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
22	Having a man/ woman struggle during sex.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
23	Being a sexual submissive to Master	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
24	Burning a woman/ man during sex.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
25	Having a girl touch or suck my penis.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
26	Having sex with someone who's wearing rubber or leather	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
27	Killing a woman/ man while having sex with her/ him	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
28	Pinning a man/ woman down on the floor and fucking him/ her up the ass	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
29	Training sex slaves	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
30	Putting my finger inside a girl's vagina.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
31	Secretly watching someone urinate or defecate	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5

32	Sexually touching a male/ female stranger in a crowd.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
33	Exposing myself to a stranger/strangers	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
34	Wearing traditionally female clothing to get sexually excited	0	0	0	0	0
	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
35	A boy giving me a blow-job or jerking me off.	0	0	0	0	0
26	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
36	Threatening to hurt if she/ he does not submit to my sexual advance or demand	0	0	0	0	0
	How pleasant was it for you to have	1	2	3	4	5
	the daydream/fantasy at that time?	1	2	3	4	3
37	Cutting a man/ woman with a knife.	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
38	Secretly watching someone who is naked	0	0	0	0	0
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
39	Watching someone undress, when they did not know it.	0	0	0	0	0
4.0	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
40	Raping a woman/ man during a gang rape	0	0	0	0	0
41	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
41	Being a Master in command of one or more sex slaves	0	0	0	0	0
42	How pleasant was it for you to have the daydream/fantasy at that time?	1	2	3	4	5
42	Being spanked/whipped by my partner during sex	0	0	0	0	0
12	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
43	Rubbing up against a male/ female stranger in a sexual manner in a	0	0	0	0	0

	crowd					
	How pleasant was it for you to have			_	_	_
	the daydream/ fantasy at that time?	1	2	3	4	5
44	Embarrassing or humiliating a man/					
• •	woman during sex (i.e. peeing on					
	him/ her, coming in his/ her face,	0	0	0	0	0
	calling him/ her names, etc.)					
	How pleasant was it for you to have	1	2	3	4	5
15	the daydream/fantasy at that time?					
45	Hurting someone to force them into	0	0	0	0	0
	having sex with me					
	How pleasant was it for you to have	1	2	3	4	5
1.0	the daydream/ fantasy at that time?	$\circ$	$\circ$	$\circ$		
46	Whipping someone.	0	0	0	O	O
	How pleasant was it for you to have	1	2	3	4	5
47	the daydream/ fantasy at that time?					
47	Holding a woman's/ man's head in		_		_	
	front of my penis and making him/	0	0	0	0	O
	her suck it against his/ her will					
	How pleasant was it for you to have	1	2	3	4	5
40	the daydream/fantasy at that time?					
48	Overpowering a man/ woman and	0	0	0	0	0
	forcing him/ her to have sex with me					
	How pleasant was it for you to have	1	2	3	4	5
40	the daydream/fantasy at that time?					
49	Engaging in erotic asphyxiation (e.g.					
	self-hanging, strangulation, choking,	0	0	0	0	0
	or suffocation) either alone or with a					
	partner					
	How pleasant was it for you to have	1	2	3	4	5
50	the daydream/fantasy at that time?	$\circ$	$\circ$	$\circ$		
50	Being a sex slave	0	0	O	O	O
	How pleasant was it for you to have	1	2	3	4	5
<i>C</i> 1	the daydream/fantasy at that time?					
51	Putting my fingers into a girl's/ boy's	0	0	0	0	0
	rear-end.					
	How pleasant was it for you to have	1	2	3	4	5
52	the daydream/fantasy at that time?					
52	Strangling a woman/ man during	0	0	0	0	0
	Sex.					
	How pleasant was it for you to have	1	2	3	4	5
<i>5</i> 2	the daydream/fantasy at that time?					
53	Exposing my penis to a stranger/	0	0	0	0	0
	strangers					
	How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5
	ine adyaream/ janiasy at that time?					

54	Handcuffing a man/ woman to a chair and having intercourse with	0	0	0	0	0
	him/ her  How pleasant was it for you to have the daydream/ fantasy at that time?	1	2	3	4	5

**PART 2 DIRECTIONS:** Click on the circle that indicates how often you have done the following things. Please know that you are not being evaluated or judged based on your responses.

		Never (0)	Once (1 time)	Sometimes (2-10 times)	Fairly Often (11-50 times)	Very Often (50+ times)
1	I have become sexually excited by wearing women's clothing.	0	0	0	0	0
2	In a crowd, I become sexually excited by rubbing up against or touching strangers.	0	0	0	0	0
3	I have been sexually excited by embarrassing or humiliating someone.	0	0	0	0	0
4	I get sexual pleasure out of hurting someone.	0	0	0	0	0
5	I have had sexual activity with a child (12 or younger), when I was 16 or older.	0	0	0	0	0
6	I have gotten sexually turned on by smelling or feeling a woman's/men's underwear or shoes.	0	0	0	0	0
7	I have come while exposing my penis.	0	0	0	0	0
8	I have worn women's clothing or tried them on.	0	0	0	0	0
9	I have come while beating someone.	0	0	0	0	0
10	I have tied someone up while we were having sex.	0	0	0	0	0
11	I have hurt someone on purpose during sex.	0	0	0	0	0
12	I have hurt a man/ woman while having sex with him/ her.	0	0	0	0	0
13	I have come while threatening or frightening someone.	0	0	0	0	0
14	I have become sexually excited by threatening or frightening someone.	0	0	0	0	0

15	I have secretly watched people having sex (not counting movies and sex shows).	0	0	0	0	0
16	It has excited me more to hurt a person physically than to have sex with that person.	0	0	0	0	0
17	I have masturbated while watching someone secretly.	0	0	0	0	0
18	I have exposed my penis to a boy/ girl or a man/ woman who did not know me.	0	0	0	0	0
19	While having sex, I have tied up or handcuffed someone.	0	0	0	0	0
20	I have enjoyed hurting a child during sex.	0	0	0	0	0
21	While having sex I have enjoyed scaring my companion so that he/ she begged me to stop.	0	0	0	0	0
22	While having sex, I have used handcuffs, whips, or leathers.	0	0	0	0	0
23	I have been sexually excited by beating someone.	0	0	0	0	0
24	I have beaten a man/ woman while I was having sex with him/ her.	0	0	0	0	0
25	I have burned someone on purpose during sex.	0	0	0	0	0
26	I have really hurt a woman/ man or girl/ boy physically during sex	0	0	0	0	0
27	I have <i>threatened</i> to use physical force on a man/ woman or a boy/ girl (saying I would hit, grab, hold, or hurt him/ her) to make him/her go along with: sex play (touching, feeling, kissing, or petting)	0	0	0	0	0
28	I have <u>threatened</u> to use physical force on a woman/ man or a girl/ boy (saying I would hit, grab, hold, or hurt her/ him) to make her/ him go along with: attempted or completed sexual intercourse	0	0	0	0	0
29	I have <u>threatened</u> to use physical force on a man/ woman or a boy/ girl (saying I would hit, grab, hold, or hurt him/ her) to make him/ her go along with: other sexual acts, such as oral or anal sex	0	0	0	0	0

30	I have <u>used</u> some physical force, such as pinning a woman/man or a girl/boy against a wall, grabbing her/him, hitting her/him, holding her/him down, or hurting her/him to make her/him go along with: sex play (touching, feeling, kissing, or notting)	0	Ο	0	0	0
31	petting) I have <u>used</u> some physical force, such as pinning a man/ woman or a boy/ girl against a wall, grabbing him/ her, hitting him/ her, holding him/ her down, or hurting him/ her to make him/ her go along with: attempted or completed sexual intercourse	0	Ο	0	0	0
32	I have <u>used</u> some physical force, such as pinning a woman/ man or a girl/ boy against a wall, grabbing her/ him, hitting her/him, holding her/ him down, or hurting her/ him to make her/ him go along with: other sexual acts, such as oral or anal sex	0	0	0	0	0

# Child-Sex IAT (CSA-IAT; Gray et al., 2005)

Table 1. Word list for CSA-IAT

	CATEGORY 1	CATI	CATEGORY 2			
Sex	Non-sex	ADULT	CHILD			
Fuck	Laugh	BEARD	INFANT			
Lick	Eye	GROWN-UP	INNOCENT			
Cum	Toe	MATURE	KID			
Cock	Elbow	RESPONSIBLE	YOUNGSTER			
Kiss	Run	STRONG	SWEETS			
Lust	Smile	WISE	TOY			
Suck	Walk	WORK	<b>VULNERABLE</b>			

Table 2. Sequence of trial blocks in CSA-IAT – version 1

Block	No. of trials	Function	Items assigned to left-key response ['e' on the keyboard]	Items assigned to right-key response (letter 'i' on the
				keyboard)
1	20	Practice	ADULT words	CHILD-words
2	20	Practice	Sex-words	Non-sex-words
3	20	Practice	ADULT-words + sex-words	CHILD-words + non-sex-words
4	40	Test	ADULT-words + sex-words	CHILD-words + non-sex-words
5	40	Practice	CHILD-words	ADULT-words
6	20	Practice	CHILD-words + sex-words	ADULT-words + non-sex-
				words
7	40	Test	CHILD-words + sex-words	ADULT-words + non-sex-
				words

*Note:* For half the subjects, the position of Blocks 1, 3, and 4 are switched with those of Blocks 5,6, and 7 respectively (see table 3 below).

Table 3. Counterbalanced sequence of trial blocks in CSA-IAT

Block	No. of	Function	Items assigned to left-key	Items assigned to right-key
	trials		response ['e' on the	response (letter 'i' on the
			keyboard]	keyboard)
1	20	Practice	CHILD-words	ADULT-words
2	20	Practice	Sex-words	Non-sex-words
3	20	Practice	CHILD-words + sex-words	ADULT-words + non-sex- words
4	40	Test	CHILD-words + sex-words	ADULT-words + non-sex- words
5	40	Practice	ADULT words	CHILD-words
6	20	Practice	ADULT-words + sex-words	CHILD-words + non-sex-

7 40 Test ADULT-words + sex-words C	vords CHILD-words + non-sex- vords
-------------------------------------	--

#### General instructions

In this task, you will be presented with a set of words to classify into groups. The task requires that you classify items as quickly as you can while making as few mistakes as possible. This task will take about 5 minutes. The following is a list of category labels and the items belonging to each of those categories.

Category	Items
CHILD	INFANT, INNOCENT, KID, YOUNGSTER, SWEETS, TOY, VULNERABLE
<b>ADULT</b>	BEARD, GROWN-UP, MATURE, RESPONSIBLE, STRONG, WISE
non-sex	laugh, eye, toe, elbow, run, smile, walk
sex	fuck, lick, cum, cock, kiss, lust, suck

#### *Keep in mind:*

- Keep your index fingers on the 'e' and the 'i' keys to enable rapid response.
- Two labels at the top will tell you which words go with each key.
- Each word has a correct classification. Most of these are easy.
- Please try to go as fast as possible.
- Expect to make a few mistakes because of going fast. That's OK.
- For best results, avoid distractions and stay focused.

## I am ready to begin

#### Block 1 instructions

Put your middle or index fingers on the E and I keys of your keyboard. Words representing the categories at the top of the screen will appear one-by-one in the middle of the screen. When the item belongs to the category on the left, press the E key; when the item belongs to the category on the right, press the I key. Items belong to only one category. If you make an error, an **X** will appear – fix the error by hitting the other key.

This is a timed task. GO AS FAST AS YOU CAN while making as few mistakes as possible.

## Press the space bar to begin

#### Block 2 instructions

See above, the categories have changed. The items for sorting have changed as well. The rules, however, are the same.

When the item belongs to the category on the left, press the E key; when the item belongs to the category on the right, press the I key. Items belong to only one category. An X appears after an error – fix the error by hitting the other key. **GO AS FAST AS YOU CAN**.

### Press the space bar to begin

#### Block 3 instructions

See above, the four categories you saw separately now appear together. Remember, each item belongs to only one category.

The **green** and **white** labels at the top of the screen may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

### Press the space bar to begin.

#### Block 4 instructions

Sort the same four categories again. Remember, each item belongs to only one category.

The **green** and **white** labels at the top of the screen may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

#### Press the space bar to begin.

### Block 5 instructions

Notice above, there are only two categories, and they have switched positions. The concept that was previously on the left is now on the right, and the concept that was previously on the right is now on the left.

When the item belongs to the category on the left, press the E key; when the item belongs to the category on the right, press the I key. Items belong to only one category. If you make an error, an  $\mathbf{X}$  will appear – fix the error by hitting the other key.

This is a timed task. GO AS FAST AS YOU CAN while making as few mistakes as possible.

#### Press the space bar to begin

#### Block 6 instructions

See above, the four categories now appear in a new configuration. Remember, each item belongs to only one category.

The **green** and **white** labels at the top may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

## Press the space bar to begin

Block 7 instructions

Sort the same four categories again. Remember, each item belongs to only one category.

The **green** and **white** labels at the top may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

Press the space bar to begin

## Rape Evaluation IAT (RE-IAT; Nunes et al., 2008)

Table 1 Word List for RE-IAT

C	CATEGORY 1	CA	CATEGORY 2		
Good	Bad	RAPE	NOT-RAPE		
Vacation	Rotten	FORCE	CONSENT		
Rainbow	Poison	INJURE	MUTUAL		
Smile	Sickness	RAVAGE	WILLING		
Sunshine	Vomit	VIOLATE	PERMISSION		
Paradise	Evil	ASSAULT	AGREEMENT		

Table 2
Sequence of Trial Blocks in RE-IAT

Block	No. of	Function	Items assigned to left-key	Items assigned to right-key	
	trials		response ['e' on the	response (letter 'i' on the	
			keyboard]	keyboard)	
1	20	Practice	NOT RAPE-words	RAPE-words	
2	20	Practice	Good-words	Bad-words	
3	20	Practice	NOT RAPE-words + good-	RAPE-words + bad-words	
			words		
4	40	Test	NOT RAPE-words + good-	RAPE-words + bad-words	
			words		
5	40	Practice	RAPE words	NOT RAPE-words	
6	20	Practice	RAPE-words + good-words	NOT RAPE-words + bad-	
				words	
7	40	Test	RAPE-words + good-words	NOT RAPE-words + bad-	
				words	

<sup>\*</sup>For half the subjects, the position of Blocks 1, 3, and 4 are switched with those of Blocks 5,6, and 7 respectively (see table 3 below).

Table 3
Counterbalanced Sequence of Trial Blocks in RE-IAT

Block	No. of	Function	Items assigned to left-key	Items assigned to right-key
	trials		response ['e' on the	response (letter 'i' on the
			keyboard]	keyboard)
1	20	Practice	RAPE words	NOT RAPE-words
2	20	Practice	Good-words	Bad-words
3	20	Practice	RAPE-words + good-words	NOT RAPE-words + bad-
				words
4	40	Test	RAPE-words + good-words	NOT RAPE-words + bad-

				words
5	40	Practice	NOT RAPE-words	RAPE-words
6	20	Practice	NOT RAPE-words + good-words	RAPE-words + bad-words
7	40	Test	NOT RAPE-words + good-words	RAPE-words + bad-words

#### General instructions

In this task, you will be presented with a set of words to classify into groups. The task requires that you classify items as quickly as you can while making as few mistakes as possible. This task will take about 5 minutes. The following is a list of category labels and the items belonging to each of those categories.

Category	Items
NOT RAPE	CONSENT, MUTUAL, WILLING, PERMISSION, AGREEMENT
RAPE	FORCE, INJURE, RAVAGE, VIOLATE, ASSAULT
bad	rotten, poison, sickness, vomit, evil
good	vacation, rainbow, smile, sunshine, paradise

### *Keep in mind:*

- Keep your index fingers on the 'e' and the 'i' keys to enable rapid response.
- Two labels at the top will tell you which words go with each key.
- Each word has a correct classification. Most of these are easy.
- Please try to go as fast as possible.
- Expect to make a few mistakes because of going fast. That's OK.
- For best results, avoid distractions and stay focused.

### I am ready to begin

#### Block 1 instructions

Put your middle or index finders on the E and I keys of your keyboard. Words representing the categories at the top of the screen will appear one-by-one in the middle of the screen. When the item belongs to the category on the left, press the E key; when the item belongs to the category on the right, press the I key. Items belong to only one category. If you make an error, an X will appear – fix the error by hitting the other key.

This is a timed task. GO AS FAST AS YOU CAN while making as few mistakes as possible.

#### Press the space bar to begin

#### Block 2 instructions

See above, the categories have changed. The items for sorting have changed as well. The rules, however, are the same.

When the item belongs to the category on the left, press the E key; when the item belongs to the category on the right, press the I key. Items belong to only one category. An X appears after an error – fix the error by hitting the other key. **GO AS FAST AS YOU CAN**.

### Press the space bar to begin

#### Block 3 instructions

See above, the four categories you saw separately now appear together. Remember, each item belongs to only one category.

The **green** and **white** labels at the top of the screen may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

### Press the space bar to begin.

#### Block 4 instructions

Sort the same four categories again. Remember, each item belongs to only one category.

The **green** and **white** labels at the top of the screen may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

#### Press the space bar to begin.

### Block 5 instructions

Notice above, there are only two categories, and they have switched positions. The concept that was previously on the left is now on the right, and the concept that was previously on the right is now on the left.

When the item belongs to the category on the left, press the E key; when the item belongs to the category on the right, press the I key. Items belong to only one category. If you make an error, an  $\mathbf{X}$  will appear – fix the error by hitting the other key.

This is a timed task. GO AS FAST AS YOU CAN while making as few mistakes as possible.

#### Press the space bar to begin

### Block 6 instructions

See above, the four categories now appear in a new configuration. Remember, each item belongs to only one category.

The **green** and **white** labels at the top may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

## Press the space bar to begin

Block 7 instructions

Sort the same four categories again. Remember, each item belongs to only one category.

The **green** and **white** labels at the top may help to identify the appropriate category. Use the E and I keys to categorize items into the four categories left and right, and correct errors by hitting the other key.

Press the space bar to begin

## Viewing Time measure – Sexual interest in pedophilia (VT – Pedophilia; Banse et al., 2010)

#### General instructions

In this task, you will view a set of slides with images presented at the center of the screen. View each slide, read the question below the image, and answer it with regard to that image on a scale from 1 to 5. Hit the spacebar to advance to the next image. **This is not a reaction-time task;** take whatever time you need.

### I'm ready to begin

Suppose you are asked to evaluate the effectiveness of various models for a clothing catalogue that caters to all ages, from children to adults. Rate the effectiveness of each model on a scale form 1 to 5.

## Hit the spacebar to begin

Question that accompanies each picture:

"How effective will this person be as a catalogue model?"

Not at all				Very effective
effective				
O 1	O 2	O 3	O 4	0 5

### End of task:

Thank you for completing the task. Please close this tab/window and return to the Fluid Surveys page.

## Viewing Time measure – Sexual interest in sadomasochism (VT – Sadomasochism)

#### General instructions

In this task, you will view a set of slides with images presented at the center of the screen. View each slide, read the question below the image, and answer it with regard to that image on a scale from 1 to 5. Hit the spacebar to advance to the next image. **This is not a reaction-time task**; take whatever time you need.

### I'm ready to begin

Suppose you are asked to rate the cover shots of two magazines; one is a travel magazine, the other is a Bondage and Sadism magazine. You are asked to rate the artistic quality of these images. Please rate the artistic quality of the images that follow on a scale from 1 to 5.

WARNING: It is illegal to save, copy, or reproduce the images that appear in this task.

## Hit the spacebar to begin

Question that accompanies each picture: "How artistic is this image?"									
Not at all artistic O 1	O 2	O 3	O 4	Very artistic O 5					

End of task:

Thank you for completing the task. Please close this tab/window and return to the Fluid Surveys page.

DISLAIMER: Content is being used for illustrative purposes only and any person depicted in the content is a model.

## Interest in Child Molestation Scale (ICMS; Gannon & O'Connor, 2012)

#### Situation 1

DIRECTIONS: Please read the following text carefully and imagine yourself in the situation presented.

You have been babysitting a child recently. One evening you allow them to stay up late and watch a horror movie with you. They get scared and cuddle up to you to hide their face. Eventually they fall asleep on the sofa next to you with their head resting on your lap. You are keen to grab this opportunity and fondle them. The child doesn't do or say anything and doesn't seem to mind, so you lie down with them and just do it.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In thi	s situation, h	ow sexually a	aroused would	you be?		
1 Not at all sexually aroused	2	3	4	5	6	7 Very strongly sexually aroused
2. In thi	s situation, v	vould you hav	e done the san	ne?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In thi	s situation, h	ow much wo	uld you enjoy g	getting your wa	ay?	
1 Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

Situation 2

DIRECTIONS: Please read the following text carefully and imagine yourself in the situation

#### presented

One of your neighbor's children has a reputation for being promiscuous. You have heard that they have had many sexual relationships with peers and that they are sexually experienced for their age. You get the feeling that they like you so you invite them in and then try to persuade them to sleep with you. Initially they are not keen on the idea, but put up hardly any resistance when you simply undress them and have sex with them.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In thi	s situation, h	now sexually a	roused would	you be?		
1 Not at all sexually aroused	2	3	4	5	6	7 Very strongly sexually aroused
2. In thi	s situation, v	would you have	e done the san	ne?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In thi	s situation, h	now much wou	ıld you enjoy g	getting your wa	ay?	
1 Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

#### Situation 3

DIRECTIONS: Please read the following text carefully and imagine yourself in the situation presented

Imagine you are a teacher. You get on especially well with a child in your class. This child gets red in the face and embarrassed when they are around you, and you know they really like you. They are struggling to keep up so you offer extra tutoring after school to help them to catch up

with the rest of the class. After helping with their schoolwork you invite them back to your house for some juice and offer to drive them home afterwards. At your place, you start fondling and kissing them on the sofa. They try to move out of reach, but you tell them that their grades stand to be enhanced by being on good terms with the teacher. In due course they seem to accept this, and don't resist when you start to fondle them.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In this situation, how sexually aroused would you be? 2 3 5 6 7 1 Not at all Verv sexually strongly aroused sexually aroused 2. In this situation, would you have done the same if you were sure that no one would ever find out and you'd never be punished for it? 1 2 3 4 5 6 7 Would Would definitely definitely not have have done done the the same same

3. In this situation, how much would you enjoy getting your way?

1 2 3 4 5 6 7
Would not enjoy it at all greatly enjoy it

## Situation 4

DIRECTIONS: Please read the following text carefully and imagine yourself in the situation presented

You live near a school and you are out walking your dog one day when a child comes up to you saying that they really like your dog. You get the impression that they really like you as they came up to you first, so you invite them to come back with you and play with the dog in the garden. After initial hesitation, the child finally agrees. After feeding the dog and playing for a short while in the garden you sit down next to them on the floor and kiss them. Then, you start to

fondle them and try to undress them. The child puts up some resistance, but this only turns you on more and using some force you continue to fondle them.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In the	is situation, h	ow sexually a	roused would	you be?		
1 Not at all sexually aroused	2	3	4	5	6	7 Very strongly sexually aroused
2. In th	is situation, w	vould you hav	e done the sam	ne?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In the	is situation, h	ow much wou	ıld you enjoy g	getting your wa	ay?	
1 Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

Situation 5

DIRECTIONS: Please read the following text carefully and imagine yourself in the situation presented

You are in your bedroom that overlooks a children's playground, watching a child doing handstands and showing his or her underwear. The child falls over and hurts his or her ankle, leaving him or her unable to walk on it. You go over to the child and invite him or her back to your house to put ice on it before it swells up. When they later indicate that he or she wants to go back home, you do not want him or her to leave. You would rather finish the meeting on more intimate terms and you try to kiss them. At that they start to cry, saying they want to get back to their parents. You continue, while pinning them down to the floor and fondling them

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In thi	is situation, h	ow sexually a	roused would	you be?		
1 Not at all sexually aroused	2	3	4	5	6	7 Very strongly sexually aroused
2. In thi	is situation, w	ould you hav	e done the sam	ie?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In thi	is situation, h	ow much wou	ıld you enjoy g	getting your w	ay?	
1 Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

### Rape Proclivity Scale (RP; Bohner et al., 1998)

#### Situation 1

DIRECTIONS: Please read the following text carefully and imagine yourself in the situation presented.

You have gone out a few times with a woman you met recently. One weekend you go to a film together and then back to your place. You have a few beers, listen to music and do a bit of petting. At a certain point your friend realises she has had too much to drink to be able to drive home. You say she can stay over with you, no problem. You are keen to grab this opportunity and sleep with her. She objects, saying you are rushing her and anyway she is too drunk. You don't let that put you off, you lie down on her and just do it.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In this situation, how sexually aroused would you be? 1 2 5 7 3 4 6 Not at all Very sexually strongly aroused sexually aroused 2. In this situation, would you have done the same? 2 4 5 6 7 1 3 Would Would definitely definitely not have have done done the the same same 3. In this situation, how much would you enjoy getting your way? 2 3 5 6 7 Would not Would enjoy it at greatly

Situation 2

enjoy it

DIRECTIONS: Please read the text carefully and again imagine yourself in the situation presented.

all

A while back, you met an attractive woman in a disco and you would like to take things a bit further with her. Friends of yours have a holiday home, so you invite her to share a weekend there. You have a great time together. On the last evening you are ready to sleep with her, but she says no. You try to persuade her, insisting it's all part of a nice weekend. You invited her, after all, and she did accept. At that she repeats that she doesn't want to have sex, but then puts up hardly any resistance when you simply undress her and have sex with her.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In thi	s situation, h	ow sexually a	roused would	you be?		
1 Not at all sexually aroused	2	3	4	5	6	7 Very strongly sexually aroused
2. In thi	s situation, v	vould you have	e done the san	ne?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In thi	s situation, h	low much wou	ld you enjoy g	getting your wa	ay?	
1 Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

Situation 3

DIRECTIONS: Please read the text carefully and again imagine yourself in the situation presented.

Imagine you are a firm's Personnel Manager. You get on especially well with a new female member of staff. At the end of a busy week, you invite her out to dinner and take her home afterwards. As you want to spend some more time in her company, you suggest she might ask you in for a coffee. Next to her on the sofa, you start fondling her and kissing her. She tries to move out of reach, but you tell her that her career prospects stand to be enhanced by her being on good

terms with her boss. In due course she seems to have accepted this, and she doesn't resist when you have sex with her.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1. In th	is situation, h	ow sexually a	roused would	you be?		
1 Not at all sexually aroused	2	3	4	5	6	7 Very strongly sexually aroused
2. In th	is situation, w	ould you hav	e done the san	ne?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In th	is situation, h	ow much wou	ıld you enjoy g	getting your wa	xy?	
l Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

#### Situation 4

DIRECTIONS: Please read the text carefully and again imagine yourself in the situation presented.

You are at a party and meet a good-looking and interesting woman. You chat, dance together and flirt. After the party you give her a lift home in your car, and she invites you in. You both sit down on the floor, then your new friend kisses you and starts to fondle you. That's absolutely fine by you, and now you want more. When you start to undress her in order to sleep with her, she suddenly pushes you off and says she wants to stop now. Her resistance only turns you on more, and, using some force, you press her down to the floor and then penetrate her.

DIRECTIONS: Now please answer the following questions, selecting the answer applicable to you

1.	In this situation,	how sexually a	roused would	you be?		
1 Not at a sexuall arouse	ly	3	4	5	6	7 Very strongly sexually aroused
2.	In this situation,	would you hav	e done the sam	ie?		
Would definite not have done the same	ely ve ne	3	4	5	6	7 Would definitely have done the same
3.	In this situation,	, how much wou	ıld you enjoy g	getting your wa	ay?	
l Would 1 enjoy it all		3	4	5	6	7 Would greatly enjoy it
			Situation 5	5		
DIRE( presen	CTIONS: Please i ted.	read the text car	efully and aga	in imagine yo	urself in the	situation
apartm she like ready t At that	elped a young wo tent as a way of sa es you. When yo to leave. You wo the woman gets droom. You throw	aying thank you ur hostess indica uld rather you fi mad and tells yo	It's a very ple ates she is beginished the ever ou to clear out.	asant evening, nning to feel ra ning in bed tog Instead, you g	and you have ather tired, year, and year, rether, and year, ab her arms	ve the impression ou are not at all ou try to kiss her.
DIREC	CTIONS: Now ple	ease answer the j	following quest	tions, selecting	the answer	applicable to you
1.	In this situation,	how sexually a	roused would	you be?		
1	2	3	4	5	6	7

Not at all sexually aroused						Very strongly sexually aroused
2. In th	is situation, v	vould you hav	e done the san	ne?		
1 Would definitely not have done the same	2	3	4	5	6	7 Would definitely have done the same
3. In th	is situation, h	ow much wou	ıld you enjoy ş	getting your w	ay?	
1 Would not enjoy it at all	2	3	4	5	6	7 Would greatly enjoy it

## **Barratt Impulsiveness Scale (BIS-11)**

DIRECTIONS: People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and select the appropriate circle. Do not spend too much time on any statement. Answer quickly and honestly.

	1 (Rarely / never)	2 (Occasiona lly)	3 (Often)	4 (Almost Always / Always)
1. I plan tasks carefully.	0	0	0	0
2. I do things without thinking.	0	0	0	0
3. I make up my mind quickly.	0	0	0	0
4. I am happy-go-lucky.	0	0	0	0
5. I don't "pay attention."	0	0	0	0
6. I have "racing" thoughts.	0	0	0	0
7. I plan trips well ahead of time.	0	0	0	0
8. I am self-controlled.	0	0	0	0
9. I concentrate easily.	0	0	0	0
10. I save regularly.	0	0	0	0
11. I "squirm" at plays or lectures.	0	0	0	0
12. I am a careful thinker.	0	0	0	0
13. I plan for job security.	0	0	0	0
14. I say things without thinking.	0	0	0	0
15. I like to think about complex	0	0	0	0
problems.	$\circ$			0
16. I change jobs.	0	0	0	0
17. I act "on impulse."	O	O	O	O
18. I get easily bored when solving	0	0	0	0
thought problems.				
19. I act on the spur of the moment.	0	0	0	0
20. I am a steady thinker.	0	0	0	0
21. I change residences.	0	Ö	0	Ö
22. I buy things on impulse.	Ö	Ö	Ö	Ö
23. I can only think about one	_			
thing at a time.	0	0	0	0
24. I change hobbies.	0	0	0	0
25. I spend or charge more than I				
earn.	O	0	O	0
26. I often have extraneous				$\circ$
thoughts when thinking.	O	O	O	0
27. I am more interested in the	0	0	0	0
present than the future.	O	J	O	_
28. I am restless at the theater or	0	0	0	0

# Eysenck's Impulsiveness Questionnaire – Impulsiveness (Imp) and Venturesomeness (Vent) subscales (I<sub>7</sub>; Eysenck et al., 1985)

DIRECTIONS: Please answer each question by clicking on either 'YES' or 'NO'. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question.

1. Would you enjoy water skiing?	YES	NO O
2. Usually do you prefer to stick to brands you know are reliable, to		
trying new ones on the chance of finding something better?	0	0
3. Do you quite enjoy taking risks?	0	0
4. Would you enjoy parachute jumping?	0	0
5. Do you often buy things on impulse?	0	0
6. Do you generally do and say things without stopping to think?	0	0
7. Do you often get into a jam because you do things without thinking?	0	0
8. Do you think hitchhiking is too dangerous a way to travel?	0	0
9. Do you like diving off the highboard?	0	0
10. Are you an impulsive person?	0	0
11. Do you welcome new and exciting experiences and sensations, even if they are a little frightening and unconventional?	0	0
12. Do you usually think carefully before doing anything?	0	0
13. Would you like to learn to fly an airplane?	0	0
14. Do you often do things on the spur of the moment?	0	0
15. Do you mostly speak without thinking things out?	0	0
16. Do you often get involved in things you later wish you could get out of?	0	0
17. Do you get so 'carried away' by new and exciting ideas, that you never think of possible snags?	0	0
18. Do you find it hard to understand people who risk their necks climbing mountains?	0	0
19. Do you sometimes like doing things that are a bit frightening?	0	0
20. Do you need to use a lot of self-control to keep out of trouble?	0	0
21. Would you agree that almost everything enjoyable is illegal or immoral?	0	0
22. Generally do you prefer to enter cold sea water gradually, to diving or jumping straight in?	0	0
23. Are you often surprised at people's reactions to what you do or say?	0	0
24. Would you enjoy the sensation of skiing very fast down a high		
mountain slope?	0	0
25. Do you think an evening out is more successful if it is unplanned	0	0
or arranged at the last moment?	-	-
26. Would you like to go scuba diving?	0	0
27. Would you enjoy fast driving?	0	0

28. Do you usually work quickly, without bothering to check?	0	0
29. Do you often change your interests?	0	0
30. Before making up your mind, do you consider all the advantages	0	0
and disadvantages?	O	0
31. Would you like to go pot-holing?	0	0
32. Would you be put off a job involving quite a bit of danger?	0	0
33. Do you prefer to 'sleep on it' before making decisions?	0	0
34. When people shout at you, do you shout back?	0	0
35. Do you usually make up your mind quickly?	0	0

### Multidimensional Anger Inventory (MAI; Siegel, 1986)

DIRECTIONS: Everybody gets angry from time to time. A number of statements that people have used to describe the times that they get angry are included below. Read each statement and rate how descriptive it is of you. There are no right or wrong answers.

- 1 = Completely undescriptive of you
- 2 = Mostly undescriptive of you
- 3 = Partly undescriptive and partly descriptive of you
- 4 = Mostly descriptive of you
- 5 = Completely descriptive of you

	Items	1	2	3	4	5
1	I tend to get angry more frequently than most people.	0	0	0	0	0
2	Other people seem to get angrier than I do in similar circumstances.	0	0	0	0	0
3	I harbor grudges that I don't tell anyone about.	0	0	0	0	0
4	I try to get even when I'm angry with someone.	0	0	0	0	0
5	I am secretly quite critical of others.	0	0	0	0	0
6	It is easy to make me angry.	0	0	0	0	0
7	When I am angry with someone, I let that person know.	0	0	0	0	0
8	I have met many people who are supposed to be experts who are no better than I.	0	0	0	0	0
9	Something makes me angry almost every day.	0	0	0	0	0
10	I often feel angrier than I think I should.	0	0	0	0	0
11	I feel guilty about expressing my anger.	0	0	0	0	0
12	When I am angry with someone, I take it out on whoever is around.	0	0	0	0	0
13	Some of my friends have habits that annoy and bother me very much.	0	0	0	0	0
14	I am surprised at how often I feel angry.	0	0	0	0	0
15	Once I let people know I'm angry, I can put it out of my mind.	0	0	0	0	0
16	People talk about me behind my back.	0	0	0	0	0
17	At times, I feel angry for no specific reason	0	0	0	0	0
18	I can make myself angry about something in the past just by thinking about it	0	0	0	0	0
19	Even after I have expressed my anger, I have trouble forgetting about it.	0	0	0	0	0
20	When I hide my anger from others, I think about it for a long time.	0	0	0	0	0
21	People can bother me just by being around.	0	0	0	0	0
22	When I get angry, I stay angry for hours.	Ö	Ō	Ō	Ō	Ō
23	When I hide my anger from others, I forget about it	0	0	0	0	0

	pretty quickly.					
24	I try to talk over problems with people without letting them know I'm angry.	0	0	0	0	0
25	When I get angry, I calm down faster than most people.	0	0	0	0	0
26	I get so angry, I feel like I might lose control.	0	0	0	0	0
27	If I let people see the way I feel, I'd be considered a hard person to get along with.	0	0	0	0	0
28	I am on my guard with people who are friendlier than I expected.	0	0	0	0	0
29	It's difficult for me to let people know I'm angry.	0	0	0	0	0
30	I get angry when someone lets me down.	0	0	0	0	0
31	I get angry when people are unfair.	0	0	0	0	0
32	I get angry when something blocks my plans.	0	0	0	0	0
33	I get angry when I am delayed.	0	0	0	0	0
34	I get angry when someone embarrasses me.	0	0	0	0	0
35	I get angry when I have to take orders from someone less capable than I.	0	0	0	0	0
36	I get angry when I have to work with incompetent people.	0	0	0	0	0
37	I get angry when I do something stupid.	0	0	0	0	0
38	I get angry when I am not given credit for something I have done.	0	0	0	0	0

## RAPE scale (Bumby, 1996)

DIRECTIONS: Rate your agreement with each of the following items.

		1 Strongly disagree	2	3	4 Strongly agree
1	Men who commit rape are probably responding to a lot of stress in their lives and raping helps to reduce stress	0	0	0	0
2	Women who get raped probably deserved it.	0	0	0	0
3	Women generally want sex no matter how they can get it.	0	0	0	0
4	Since prostitutes sell their bodies for sexual purposes anyway, it is not as bad if someone forces them into sex.	0	0	0	0
5	If a woman does not resist strongly to sexual advances, she is probably willing to have sex.	0	0	0	0
6	Women often falsely accuse men of rape.	0	0	0	0
7	A lot of women who get raped had "bad reputations" in the first place.	0	0	0	0
8	If women did not sleep around so much, they would be less likely to get raped.	0	0	0	0
9	If a woman gets drunk at a party, it is really her own fault if someone takes advantage of her sexually	0	0	0	0
10	When women wear tight clothes, short skirts, and no bra or underwear, they are asking for sex,	0	0	0	0
11	A lot of women claim they were raped just because they want attention.	0	0	0	0
12	Victims of rape are usually a little bit to blame for what happens.	0	0	0	0
13	If a man has had sex with a woman before, then he should be able to have sex with her any time he wants	0	0	0	0
14	Women who go to bars a lot are mainly looking to have sex.	0	0	0	0
15	A lot of times, when women say "no" they are just playing hard to get, and really mean "yes"	0	0	0	0
16	Part of a wife's duty is to satisfy her husband sexually whenever he wants it,	0	0	0	0

17	whether or not she is in the mood Often a woman reports rape long after the fact because she gets mad at the man she had sex with and is just trying to get back at him.	0	0	0	0
18	As long as a man does not slap or punch a woman in the process, forcing her to have sex is not as bad	0	0	0	0
19	When a woman gets raped more than once, she is probably doing something to cause it	0	0	0	0
20	Women who get raped will eventually forget about it and get on with their lives.	0	0	0	0
21	On a date, when a man spends a lot of money on a woman, the woman ought to at least give the man something in return sexually	0	0	0	0
22	I believe that if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way.	0	0	0	0
23	When women act like they are too good for men, most men probably think about raping the women to put them in their	0	0	0	0
24	I believe that society and the courts are too tough on rapists.	0	0	0	0
25	Most women are sluts and get what they deserve.	0	0	0	0
26	Before the police investigate a woman's claim of rape, it is a good idea to find out what she was wearing, if she had been drinking, and what kind of a person she is.	0	0	0	0
27	Generally, rape is not planned - a lot of times it just happens.	0	0	0	0
28	If a person tells himself that he will never rape again, then he probably	0	0	0	0
29	won't. A lot of men who rape do so because they are deprived of sex.	0	0	0	0
30	The reason a lot of women say "no" to sex is because they don't want to seem	0	0	0	0
31	loose. If a woman goes to the home of a man on the first date, she probably wants to	0	0	0	0

	have sex with him.				
32	Many women have a secret desire to be forced into having sex.	0	0	0	0
33	Most of the men who rape have stronger sexual urges than other men.	0	0	0	0
34	I believe that any woman can prevent herself from being raped if she really wants to.	0	0	0	0
35	Most of the time, the only reason a man commits rape is because he was sexually assaulted as a child.	0	0	0	0

## MOLEST scale (Bumby, 1996)

DIRECTIONS: Rate your agreement with each of the following items.

		1 Strongly disagree	2	3	4 Strongly agree
1	I believe that sex with children can make the child feel closer to adults. Since some victims tell the offender that	0	0	0	0
2	it feels good when the offender touches them, the child probably enjoys it and it probably won't affect the child much.	0	0	0	0
3	Many children who are sexually assaulted do not experience any major problems because of the assaults.	0	0	0	0
4	Sometimes, touching a child sexually is a way to show love and affection.	0	0	0	0
5	Sometimes children don't say no to sexual activity because they are curious about sex or enjoy it	0	0	0	0
	When kids don't tell that they were involved in sexual activity with an adult it is probably because they liked it or	0	0	0	0
6 7	weren't bothered by it.  If a person does not use force to have sexual activity with a child, it will not harm the child as much.	0	0	0	0
8	Some people are not "true" child molesters - they are just out of control and made a mistake	0	0	0	0
9	Just fondling a child is not as bad as penetrating a child, and will probably not affect the child as much	0	0	0	0
10	Some sexual relations with children are a lot like adult sexual relationships.	0	0	0	0
11	Sexual activity with children can help the child learn about sex.	0	0	0	0
12	I think child molesters often get longer sentences than they really should.	0	0	0	0
13	Kids who get molested by more than one person probably are doing something to attract adults to them	0	0	0	0
14	Society makes a much bigger deal out of sexual activity with children than it really is.	0	0	0	0

	Sometimes child molesters suffer the most, lose the most, or are hurt the most as a result of a sexual assault on a child more than a child suffers, loses, or is	0	0	0	0
15 16	hurt. It is better to have sex with one's child than to cheat on one's wife.	0	0	0	0
17	There is no real manipulation or threat used in a lot of sexual assaults on children.	0	0	0	0
18	Some kids like sex with adults because it makes them feel wanted and loved.	0	0	0	0
19	Some men sexually assaulted children because they really thought the children would enjoy how it felt	0	0	0	0
20	Some children are willing and eager to have sexual activity with adults.  During sexual assaults on children,	0	0	0	0
21	some men ask their victims if they liked what they were doing because they wanted to please the child and make them feel good.	0	0	0	0
	Children who have been involved in sexual activity with an adult will eventually get over it and go on with	0	0	0	0
22 23	their lives.  Some children can act very seductively.  Trying to stay away from children is	0	0	0	0
24	probably enough to prevent a molester from molesting again.	0	0	0	0
25	A lot of times, sexual assaults on children are not planned they just happen.	0	0	0	0
26	Many men sexually assaulted children because of stress, and molesting helped to relieve that stress	0	0	0	0
27	A lot of times, kids make up stories about people molesting them because they want to get attention	0	0	0	0
	If a person tells himself that he will never molest again, then he probably	0	0	0	0
<ul><li>28</li><li>29</li></ul>	won't.  If a child looks at an adult's genitals, the child is probably interested in sex.	0	0	0	0
30	Sometimes victims initiate sexual activity.	0	0	0	0

31	Some people turn to children for sex because they were deprived of sex from adult women	0	0	0	0
32	Some young children are much more adult-like than other children.	0	0	0	0
22	Children who come into the bathroom when an adult is getting undressed or going to the bathroom are probably just	0	0	0	0
33	trying to see the adult's genitals. Children can give adults more			0	0
34	acceptance and love than other adults.	0	O	O	O
35	Some men who molest children really don't like molesting children.	0	0	0	0
36	I think the main thing wrong with sexual activity with children is that it is against the law	0	0	0	0
37	If most child molesters hadn't been sexually abused as a child, then THEY probably never would have molested a child.	0	0	0	0

# The Balanced Inventory of Desirable Responding – Version 6 – Impression Management Scale (BIDR-6; Paulhus, 1991)

DIRECTIONS: Using the scale below as a guide, indicate how true each item is of you.

1 NOT TRUE	2	3 SC	4 OMEWI TRUE		5		6		7 VERY TRUE
	es tell lies if I h		1 O O	2 O O	3 O	4 O O	5 O O	6 O O	7 O O
		ns when I have	0	0	0	0	0	0	0
taken advanta 4. I never sw	age of someon	<b>2</b> .	0	0	0	0	0	0	0
	es try to get eve	en rather than	0	0	0		0	0	0
forgive and f	_	.0.7.	O	O	O	0	O	O	O
6. I always of to get caught	•	if I'm unlikely	0	0	0	0	0	0	0
7. I have said behind his or		d about a friend	0	0	0	0	0	0	0
	ear people talki	ng privately, I	0	0	0	0	0	0	0
9. I have rece	9. I have received too much change from a salesperson without telling him or her.		0	0	0	0	0	0	0
	declare everyth		0	0	0	0	0	0	0
	as young, I so	metimes stole	0	0	0	0	0	0	0
_	ver dropped lit	ter on the	0	0	0	0	0	0	0
	nes drive faster	than the speed	0	0	0	0	0	0	0
	ad sexy books	or magazines.	0	0	0	0	0	0	0
15. I have do other people	ne things that labout.	don't tell	0	0	0	0	0	0	0
		don't belong to	0	0	0	0	0	0	0
17. I have tak	ken sick-leave : hough I wasn'		0	0	0	0	0	0	0
18. I have ne	_	library book or	0	0	0	0	0	0	0
	me pretty awfu		0	0	0	0	0	0	0
20. I don't go business.	ossip about oth	er people's	0	0	0	0	0	0	0

## Pornography Use Questionnaire (adopted from the MASA)

1. Please indicate the type and frequency of pornographic material accessed in the past year:

	Never (0)	Once or a few times	A few times a year	Once or twice a month	Once or twice a week	Almost every day
X-rated Magazines	0	0	0	0	0	0
X-rated Internet sites	0	0	0	0	0	0
X-rated books X-rated sex	0	0	0	0	0	0
movies or videos	0	0	0	0	0	0
Telephone sex services	0	0	0	0	0	0
Live sex shows	0	0	0	0	0	0

2. The kind of sex materials I looked at as a child (before my 13th birthday) included:

	Never (0)	Once or a few times	A few times a year	Once or twice a month	Once or twice a week	Almost every day
Nude women X-rated sex movies or videos Magazines showing sex acts	0	0	0	0	0	0
where people were not really physically harmed, but the scenes included such acts as tying, handcuffing, spanking,	0	0	0	0	0	0
or similar act Magazines showing sex acts where people actually appeared to be physically harmed	0	0	0	0	0	0

## 3. As a teenager (age 13 to 17):

	Never (0)	Once or a few times	A few times a year	Once or twice a month	Once or twice a week	Almost every day
I looked at or read sexual materials (pictures of nudes, people making love, etc.)	0	0	0	0	0	0

I masturbated when I looked at or read sex materials	0	0	0	0	0	0
4. The kind of sex materials I loo birthday) included:	ked at as a	teenager (	from my 1	13th birthd	lay to my 1	7th
	Never (0)	Once or a few times	A few times a year	Once or twice a month	Once or twice a week	Almost every day
Magazines showing sex acts where people were not really physically harmed, but the scenes included such acts such as tying, handcuffing,	0	0	0	0	0	0
spanking, or similar acts Magazines showing sex acts where people actually appeared to be physically harmed	0	0	0	0	0	0

## Sexual Compulsivity Scale (SCS; Kalichman et al., 1994)

DIRECTIONS: A number of statements that some people have used to describe themselves are given below. Read each statement and then click on the appropriate circle to show how well you believe the statement describes you.

	1 Not at all like me	2 Slightly like me	3 Mainly like me	4 Very much like me
1. My sexual appetite has gotten in the way of my relationships.	0	0	0	0
2. My sexual thoughts and behaviors are causing problems in my life.	0	0	0	0
3. My desires to have sex have disrupted my daily life	0	0	0	0
4. I sometimes fail to meet my commitments and responsibilities because of my sexual behaviors.	0	0	0	0
5. I sometimes get so horny I could lose control.	0	0	0	0
6. I find myself thinking about sex while at work.	0	0	0	0
7. I feel that sexual thoughts and feelings are stronger than I am	0	0	0	0
8. I have to struggle to control my sexual thoughts and behaviors	0	0	0	0
9. I think about sex more than I would like to.	0	0	0	0
10. It has been difficult for me to find sex partners who desire having sex as much as I want to.	0	0	0	0

## Narcissistic Personality Inventory – 16 items (NPI-16; Ames et al., 2006)

DIRECTIONS: Here you'll find a list of 16-paired statements. For each pair, choose the one statement that best matches you (even if it's not a perfect fit).

0	When people compliment me I some I know that I am good because every	_
0	I prefer to blend in with the crowd.	Statement 2
0	I like to be the center of attention.	
		Statement 3
0	I am no better or worse than most pe	ople.
O	I think I am a special person.	C. A.
$\overline{}$	I libra to have exith anity even athen no	Statement 4
0	I like to have authority over other per	opie.
0	I don't mind following orders.	Statement 5
0	I find it easy to manipulate people.	Statement 5
0	I don't like it when I find myself man	ipulating people.
		Statement 6
0	I insist upon getting the respect that i	s due me.
0	I usually get the respect that I deserve	
		Statement 7
0	I don't particularly like to show off m	ıy body.
O	I am apt to show off my body.	G
$\sim$	T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Statement 8
0	I always know what I am doing.	n doing
0	Sometimes I am not sure of what I ar	Statement 9
$\circ$	Sometimes I tell good stories.	Statement )
0	Everybody likes to hear my stories.	
	2, 41, 60 dy 11165 to 11601 111, 5001165.	Statement 10
0	I expect a great deal from other peop	le.
0	I like to do things for other people.	
		Statement 11
0	I really like to be the center of attenti	
0	It makes me uncomfortable to be the	
_	D: d:1 ! d.	Statement 12
0	Being an authority doesn't mean that	
0	People always seem to recognize my	Statement 13
$\circ$	I am going to be a great person.	Statement 13
0	I hope I am going to be successful.	
-		Statement 14
0	People sometimes believe what I tell	

0	I can make anybody believe anything I want them to
	Statement 15
0	I am more capable than other people.
0	There is a lot that I can learn from other people.
	Statement 16
0	I am much like everybody else.
0	I am an extraordinary person.

## Self-Report Psychopathy – Short Form (SRP-SF; Paulhus et al., in press)

DIRECTIONS: Using the scale 5-point below, please rate the degree to which you agree with the following statements.

1 Disagree Strongly	2 Disagree	3 Neutral		4 Agree	<b>.</b>	5 Agr Stron	
			1	2	3	4	5
1. I'm a rebelliou	is person.		0	0	0	0	0
	een involved in delin	quent gang	0	0	0	0	0
activity.					_		
3. Most people at	-		0	0	0	0	0
the thrill of it.	e something dangeror	as just for	0	0	0	0	0
	someone into giving	me	_	_		_	_
money.	someone mie grymg		0	0	0	0	0
-	d a law enforcement	official or	0	0	0	0	0
social worker.			O	O	O	O	O
_	ed to be someone else	e in order	0	0	0	0	0
to get something.	t fights		0	0	0	0	0
8. I like to see fis	cick out of 'scamming	$\sigma$ '		O	_	_	O
someone.	section seamming	5	0	0	0	0	0
	how far you can pus	h people	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
before they get upse			0	0	0	0	O
11. I enjoy doing			0	0	0	0	0
	into a building or ve	ehicle in	0	0	0	0	0
order to steal somet		h my					
family any more.	to keep in touch wit	11 111y	0	0	0	0	0
14. I rarely follow	w the rules.		0	0	0	0	0
	ake advantage of othe	er people	0	0	0	0	0
before they do it to	<del>-</del>				O		O
	imes say that I'm col		0	0	0	0	0
	sex with people I ba	rely know.	0	0	0	0	0
	sports and movies.  ou have to pretend yo	uı like	O	O	O	O	0
people to get somet	1 .	ou like	0	0	0	0	0
	ed of a serious crime		0	0	0	0	0
	g in trouble for the sa	me things	0	0	0	0	0
over and over.			J	<u> </u>	0	<u> </u>	

22. Every now and then I carry a weapon (knife or gun) for protection.	0	0	0	0	0
23. You can get what you want by telling people what they want to hear.	0	0	0	0	0
24. I never feel guilty over hurting others.	0	0	0	0	0
25. I have threatened people into giving me	0	0	0	0	0
money, clothes, or makeup.  26. A lot of people are "suckers" and can easily		_	_	_	
be fooled.	0	0	0	0	0
27. I admit that I often "mouth off" without	0	0	0	0	0
thinking.					
28. I sometimes dump friends that I don't need	0	0	0	0	0
any more.					
29. I purposely tried to hit someone with the	0	0	0	0	0
vehicle I was driving.		-		_	_

#### Appendix B

#### Participant Pool Recruitment Advertisement for Male Participants

Title: Deviant Sexuality and Personality Factors Researchers: Fiona Dyshniku, Dr. Stephen Hibbard

Duration: 120 minutes Credits: 2.0 credits

#### Description:

The purpose of this study is to explore several aspects of illicit or socially unsanctioned sexuality (e.g. exhibitionism, fetishism, frotteurism, pedophilia, masochism, sadism, transvestic fetishism, and voyeurism), and associated personality factors. The study can be completed online over as many sessions as you like. If you volunteer to participate in this study, you will be asked to complete a series of questionnaires and tasks regarding awareness of, attitudes toward deviant sexual acts and any possible history of this. The study contains explicit language and obscene words, images, and vignettes. You may be surprised by the content.

Your responses will remain confidential and protected by several security technologies including data encryption, firewalls, and passwords. Your survey data is NEVER connected to your identifying information. As a result, the procedures implemented ensure anonymity.

If you sign up for the study, you will immediately gain access to the study URL. When you click on the URL, you will be directed to the study webpage and automatically assigned a randomly generated alphanumeric ID, which you will use to go through the survey. Participants will receive 2 bonus points for 120 minutes of participation towards the Psychology Participant Pool, if registered in the pool and enrolled in one or more eligible courses.

If you have ever been victimized in the past or have previously been the recipient of any unintended sexual advances, even if you did not recognize it as trauma at the time, then you are strongly advised against taking part in this study.

This study has received REB clearance.

#### Participant Pool Recruitment Advertisement for Female Participants

Title: Deviant Sexuality and Personality Factors Researchers: Fiona Dyshniku, Dr. Stephen Hibbard

Duration: 120 minutes Credits: 2.0 credits

#### Description:

The purpose of this study is to explore several aspects of illicit or socially unsanctioned sexuality (e.g. exhibitionism, fetishism, frotteurism, pedophilia, masochism, sadism, transvestic fetishism, and voyeurism), and associated personality factors. The study can be completed online over as many sessions as you like. If you volunteer to participate in this study, you will be asked to

complete a series of questionnaires and tasks regarding awareness of, attitudes toward deviant sexual acts and any possible history of this. The study contains explicit language and obscene words, images, and vignettes. You may be surprised by the content.

Your responses will remain confidential and protected by several security technologies including data encryption, firewalls, and passwords. Your survey data is NEVER connected to your identifying information. As a result, the procedures implemented ensure anonymity.

If you sign up for the study, you will immediately gain access to the study URL. When you click on the URL, you will be directed to the study webpage and automatically assigned a randomly generated alphanumeric ID, which you will use to go through the survey. Participants will receive 2 bonus points for 120 minutes of participation towards the Psychology Participant Pool, if registered in the pool and enrolled in one or more eligible courses.

If you have ever been victimized in the past or have previously been the recipient of any unintended sexual advances, even if you did not recognize it as trauma at the time, then you are strongly advised against taking part in this study.

This study has received REB clearance.

#### Appendix C



#### CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: Deviant Sexuality and Personality Factors

You are asked to participate in a research study conducted by Fiona Dyshniku and Dr. Stephen Hibbard from the Psychology Department at the University of Windsor. Results from this research project will contribute to Miss Dyshniku's Master's thesis.

If you have any questions or concerns about the research, please feel free to contact Fiona Dyshniku at <a href="mailto:dyshnik@uwindsor.ca">dyshnik@uwindsor.ca</a> (519-253-3000 ext.2250) or Dr. Stephen Hibbard at <a href="mailto:hibbard@uwindsor.ca">hibbard@uwindsor.ca</a> (519-253-3000 ext.2250).

#### PURPOSE OF THE STUDY

The purpose of this study is to explore several aspects of illicit or socially unsanctioned sexuality, also referred to as 'paraphilias' (i.e. exhibitionism, fetishism, frotteurism, pedophilia, masochism, sadism, transvestic fetishism, and voyeurism), and associated personality factors.

#### **PROCEDURES**

This study will be conducted online. If you volunteer to participate, you will be asked to complete a series of questionnaires and tasks regarding awareness of, attitudes toward deviant sexual acts and any possible history of this. The questionnaire contains explicit language, obscene words, and sexually suggestive images and vignettes. You may be surprised by the content.

Once you have signed up for the study, you will immediately gain access to the study URL located in the Participant Pool Advertisement. When you click on the URL, you will be directed to the study site and automatically assigned a randomly generated alphanumeric ID, which you will use to go through the survey. When you reach the study webpage, you will first be presented with a consent form. If you consent to participate, you will be asked to complete a demographic questionnaire, followed by a number of reaction timed tasks and paper-and-pencil type measures. At the end of the study, you will be directed to a separate page where you will receive post-study information, a list of community resources, and obtain your bonus credit(s). In order for the researcher to accurately allocate bonus credit(s), you will have to provide your full name, your University of Windsor email address, your biological sex, and your University of Windsor student number. This identifying information is never connected to your survey results. Similarly, the alphanumeric ID you used to complete the survey is not passed on to the page containing your identifying information. This procedure ensures anonymity.

The entire study will take approximately 120 minutes of your time. The study can be completed over as many sessions as you like over the course of a semester. Please complete this survey alone in a quiet and comfortable place where you are able to concentrate fully. Take as many breaks as you need but be sure to save your answers before leaving the site by clicking on the 'Save and continue later' button located at the bottom of every survey page. The only exceptions to this are four tasks that launch on a separate browser window/tab. Because of their nature, you cannot quit these four tasks and then return to them later. The survey will remain available for the duration of a semester and will follow the open and close dates posted on the Participant Pool website.

#### POTENTIAL RISKS AND DISCOMFORTS

The survey will ask some intimate questions about sexuality, which may trigger varying degrees of psychological or emotional discomfort. We therefore have a few recommendations in order to minimize any adverse effects.

- 1. If you have ever been victimized in the past or have previously been the recipient of any unintended sexual advances, even if you did not recognize it as trauma at the time, then you are strongly advised against taking part in this study.
- 2. Some of the test instruments include explicit language (i.e. fantasize about having a girl touch or suck my penis; fantasize about holding a man's head in front of my vagina and making him lick it against his will), obscene words (e.g. cum, cock) and/or images that may imply sexual acts but are not sexual per se. We urge you not to participate in this study if you find this kind of language or test material to be offensive, anxiety provoking, or likely to elicit trauma memories for you.
- 3. It is your right to refuse to answer any questions you are uncomfortable with. In addition, you can withdraw from the study at any point by activating the 'Click here if you wish to withdraw from the study' link located at the bottom of every survey page.
- 4. At the end of the study, or if you terminate participation before the end, you will see a number of community resources to assist you with any concerns you may have. In addition, please feel free to contact the principal investigator, Fiona Dyshniku, the faculty advisor, Dr. Stephen Hibbard, or the Student Counselling Centre at 519-253-3000 ext. 4616, in order to discuss any concerns or questions you may have.

#### POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

By participating in this study, you will have a chance to learn about and contribute to psychological research. In particular, you will be exposed to research methods in social sciences, which may be valuable to your academic and intellectual development. Further, you will have the opportunity to gain a deeper awareness of your sexual preferences and related personality factors, which could encourage personal reflection on these topics.

Finally, your participation in this study will contribute to the knowledge base on deviant sexuality, a topic with farreaching consequences for both forensic and non-forensic populations.

#### COMPENSATION FOR PARTICIPATION

You will receive 2.0 bonus credit(s) towards a psychology course for 120 minutes of participation, provided you are registered in the psychology participant pool and enrolled in one or more eligible courses.

#### CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. You will use a randomly assigned alphanumeric ID to go through the survey. At the end of the survey, you will be directed to a separate survey where you must provide your full name, your biological sex, your University of Windsor email address, and your University of Windsor student number in order to get your bonus credit(s). The number of survey items you have answered is used as an approximate indicator of your participation. Your survey data is NEVER connected to your identifying information. The procedures implemented ensure anonymity.

Data security is ensured through several security technologies including firewalls, data encryption and passwords. Identifying information will be collected and stored separately from the survey results. All digital data are securely stored on servers located in Canada. Although the principal investigator (PI) and her supervisor will have access to the electronic raw data through the PI's password-protected account, there is no way for either one of them to connect the data to a particular participant. Similarly, in the very unlikely event of a password breach, the intruder would have access to test results but not to the identity of the participant that provided those results. Any future presentations/papers/reports on the proposed study will only include aggregated results. Once the study is complete, all electronic data will be securely deleted from the online servers and kept in an SPSS file for analysis. The SPSS file will be retained for seven years in the secure University of Windsor servers under password-protection.

#### PARTICIPATION AND WITHDRAWAL

Your participation in this study is completely voluntary. You may refuse to answer any questions you find disturbing or uncomfortable. You may decline to participate after reading this Consent Form. If you initially agree to the terms and

conditions outlined in this form, but later choose to end your involvement with the study, you can exercise that right any time by activating the "Click here if you wish to withdraw from the study" link, located at the bottom of every survey page. You cannot obtain post-study information, resource list, or partial credits for your participation, if you simply close the browser. Please follow the above steps when you withdraw so you can still gain access to information, the resource list, and partial credits.

If you decide to withdraw from the study and proceed to clicking the button at the bottom of the survey page, you will be directed to a separate page where you provide identifying information in order to receive bonus credit(s) proportional to your participation. The allocation of bonus credit(s) is roughly based on the number of survey items answered. Students whose participation ends due to an unanticipated event will be awarded full credit, provided they contact the researcher with an explanation.

Given that your survey results are not personally identifiable, your data cannot be discarded from the server upon withdrawal.

The investigator may withdraw you from this research if circumstances arise which warrant doing so.

#### FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

A summary of the research findings will be made available to all participants on the University of Windsor REB website.

Web address: www.uwindsor.ca/reb

Date when results are available: September 2013

#### SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations. If so, only aggregate data will be reported.

#### RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

#### SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

Fiona Dyshniku, B.A. Hons. M.A. Candidate, Clinical Psychology - Adult Clinical track Department of Psychology University of Windsor

# It is strongly recommended that you print out a copy of this document for your records.

#### CONSENT OF RESEARCH PARTICIPANT

"I understand the information provided for the study 'Deviant Sexuality and Personality Factors' described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I will print a copy of this form for my own reference."

To acknowledge that you have read the letter of information, and that you are providing informed consent to participate in this study, please click "I agree" below.

I agree

No thank you

#### Appendix D



#### LETTER OF INFORMATION

Title of Study: Deviant Sexuality and Personality Factors

You are asked to participate in a research study conducted by Fiona Dyshniku and Dr. Stephen Hibbard from the Psychology Department at the University of Windsor. Results from this research project will contribute to Miss Dyshniku's Master's thesis.

If you have any questions or concerns about the research, please feel free to contact Fiona Dyshniku at <a href="mailto:dyshnik@uwindsor.ca">dyshnik@uwindsor.ca</a> (519-253-3000 ext.2250) or Dr. Stephen Hibbard at <a href="mailto:hibbard@uwindsor.ca">hibbard@uwindsor.ca</a> (519-253-3000 ext.2250).

#### PURPOSE OF THE STUDY

The purpose of this study is to explore several aspects of illicit or socially unsanctioned sexuality, also referred to as 'paraphilias' (i.e. exhibitionism, fetishism, frotteurism, pedophilia, masochism, sadism, transvestic fetishism, and voyeurism), and associated personality factors.

#### **PROCEDURES**

This study will be conducted online. If you volunteer to participate, you will be asked to complete a series of questionnaires and tasks regarding awareness of, attitudes toward deviant sexual acts and any possible history of this. The questionnaire contains explicit language, obscene words, and sexually suggestive images and vignettes. You may be surprised by the content.

Once you have signed up for the study, you will immediately gain access to the study URL located in the Participant Pool Advertisement. When you click on the URL, you will be directed to the study site and automatically assigned a randomly generated alphanumeric ID, which you will use to go through the survey. When you reach the study webpage, you will first be presented with a consent form. If you consent to participate, you will be asked to complete a demographic questionnaire, followed by a number of reaction timed tasks and paper-and-pencil type measures. At the end of the study, you will be directed to a separate page where you will receive post-study information, a list of community resources, and obtain your bonus credit(s). In order for the researcher to accurately allocate bonus credit(s), you will have to provide your full name, your University of Windsor email address, your biological sex, and your University of Windsor student number. This identifying information is never connected to your survey results. Similarly, the alphanumeric ID you used to complete the survey is not passed on to the page containing your identifying information. This procedure ensures anonymity.

The entire study will take approximately 120 minutes of your time. The study can be completed over as many sessions as you like over the course of a semester. Please complete this survey alone in a quiet and comfortable place where you are able to concentrate fully. Take as many breaks as you need but be sure to save your answers before leaving the site by clicking on the 'Save and continue later' button located at the bottom of every survey page. The only exceptions to this are four tasks that launch on a separate browser window/tab. Because of their nature, you cannot quit these four tasks and then return to them later. The survey will remain available for the duration of a semester and will follow the open and close dates posted on the Participant Pool website.

#### POTENTIAL RISKS AND DISCOMFORTS

The survey will ask some intimate questions about sexuality, which may trigger varying degrees of psychological or emotional discomfort. We therefore have a few recommendations in order to minimize any adverse effects.

1. If you have ever been victimized in the past or have previously been the recipient of any unintended sexual

- advances, even if you did not recognize it as trauma at the time, then you are strongly advised against taking part in this study.
- 2. Some of the test instruments include explicit language (i.e. fantasize about having a girl touch or suck my penis; fantasize about holding a man's head in front of my vagina and making him lick it against his will), obscene words (e.g. cum, cock) and/or images that may imply sexual acts but are not sexual per se. We urge you not to participate in this study if you find this kind of language or test material to be offensive, anxiety provoking, or likely to elicit trauma memories for you.
- 3. It is your right to refuse to answer any questions you are uncomfortable with. In addition, you can withdraw from the study at any point by activating the 'Click here if you wish to withdraw from the study' link located at the bottom of every survey page.
- 4. At the end of the study, or if you terminate participation before the end, you will see a number of community resources to assist you with any concerns you may have. In addition, please feel free to contact the principal investigator, Fiona Dyshniku, the faculty advisor, Dr. Stephen Hibbard, or the Student Counselling Centre at 519-253-3000 ext. 4616, in order to discuss any concerns or questions you may have.

#### POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

By participating in this study, you will have a chance to learn about and contribute to psychological research. In particular, you will be exposed to research methods in social sciences, which may be valuable to your academic and intellectual development. Further, you will have the opportunity to gain a deeper awareness of your sexual preferences and related personality factors, which could encourage personal reflection on these topics.

Finally, your participation in this study will contribute to the knowledge base on deviant sexuality, a topic with farreaching consequences for both forensic and non-forensic populations.

#### COMPENSATION FOR PARTICIPATION

You will receive 2.0 bonus credit(s) towards a psychology course for 120 minutes of participation, provided you are registered in the psychology participant pool and enrolled in one or more eligible courses.

#### CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. You will use a randomly assigned alphanumeric ID to go through the survey. At the end of the survey, you will be directed to a separate survey where you must provide your full name, your biological sex, your University of Windsor email address, and your University of Windsor student number in order to get your bonus credit(s). The number of survey items you have answered is used as an approximate indicator of your participation. Your survey data is NEVER connected to your identifying information. The procedures implemented ensure anonymity.

Data security is ensured through several security technologies including firewalls, data encryption and passwords. Identifying information will be collected and stored separately from the survey results. All digital data are securely stored on servers located in Canada. Although the principal investigator (PI) and her supervisor will have access to the electronic raw data through the PI's password-protected account, there is no way for either one of them to connect the data to a particular participant. Similarly, in the very unlikely event of a password breach, the intruder would have access to test results but not to the identity of the participant that provided those results. Any future presentations/papers/reports on the proposed study will only include aggregated results. Once the study is complete, all electronic data will be securely deleted from the online servers and kept in an SPSS file for analysis. The SPSS file will be retained for seven years in the secure University of Windsor servers under password-protection.

#### PARTICIPATION AND WITHDRAWAL

Your participation in this study is completely voluntary. You may refuse to answer any questions you find disturbing or uncomfortable. You may decline to participate after reading this Consent Form. If you initially agree to the terms and conditions outlined in this form, but later choose to end your involvement with the study, you can exercise that right any time by activating the "Click here if you wish to withdraw from the study" link, located at the bottom of every survey page. You cannot obtain post-study information, resource list, or partial credits for your participation, if you simply close the browser. Please follow the above steps when you withdraw so you can still gain access to

information, the resource list, and partial credits.

If you decide to withdraw from the study and proceed to clicking the button at the bottom of the survey page, you will be directed to a separate page where you provide identifying information in order to receive bonus credit(s) proportional to your participation. The allocation of bonus credit(s) is roughly based on the number of survey items answered. Students whose participation ends due to an unanticipated event will be awarded full credit, provided they contact the researcher with an explanation.

Given that your survey results are not personally identifiable, your data cannot be discarded from the server upon withdrawal.

The investigator may withdraw you from this research if circumstances arise which warrant doing so.

#### FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

A summary of the research findings will be made available to all participants on the University of Windsor REB website.

Web address: www.uwindsor.ca/reb

Date when results are available: September 2013

#### SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations. If so, only aggregate data will be reported.

#### RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

#### SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

Fiona Dyshniku, B.A. Hons. M.A. Candidate, Clinical Psychology - Adult Clinical track Department of Psychology University of Windsor

# It is strongly recommended that you print out a copy of this document for your records.

#### CONSENT OF RESEARCH PARTICIPANT

"I understand the information provided for the study 'Deviant Sexuality and Personality Factors' described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I will print a copy of this form for my own reference."

To acknowledge that you have read the letter of information, and that you are providing informed consent to participate in this study, please click "I agree" below.

I agree

No thank you



#### **POST-STUDY INFORMATION**

Thank you for taking part in this study. Your time and willingness to participate are greatly appreciated.

# After reading the following post-study information, please click on 'Next' to receive your bonus credit(s).

This study defined deviant sexual fantasies as any sexually arousing mental imagery of a paraphilic nature involving a sexual scenario or script. In this definition, paraphilias refer to activities of a sexual nature that are considered clinically ("medically") deviant, even though there is controversy about what is and is not deviant. These include exhibitionism (exposing yourself), fetishism (sexual interest in unusual objects), frotteurism (rubbing against strangers), pedophilia (sexual interest in children), masochism (sexual enjoyment in suffering), sadism (sexual enjoyment in hurting others), transvestic fetishism (cross-dressing), and voyeurism ("peeping"). Researchers and clinicians have conventionally viewed deviant sexual fantasies as causally related to deviant sexual behaviours in sex offenders. Less clear is the fantasy-behaviour relationship in non-forensic samples (i.e. undergraduate students and community samples). Past research has shown that close to 95% of undergraduate students report experiencing deviant sexual fantasies from time to time. However, a smaller subset of fantasizers, about 38%, will actually act out their fantasies (Williams, Cooper, Howell, Yuille, & Paulhus, 2008). Given these base rates, the present study sought to explore whether being highly impulsive, angry, or endorsing a significant number of offense-supportive cognitions, makes an individual more likely to act on his/her fantasies.

As noted in the above paraFigure, past research has shown that deviant sexual fantasies have been reported in 95% of undergraduate students, and only a small minority of fantasizers (38%) will actually act on their deviant fantasy. Fantasizing about something is not the same as acting on it, and most college students have such fantasies.

Further, the literature on deviant sexuality and its relevance to deviant sexual acts is at an early stage. As a result, none of the test instruments you were presented with as part of the survey package are used to diagnose or make legal decisions in the absence of other assessment methods (e.g. interview, case review, the Psychopathy Checklist Revised, etc.).

For further information on these topics, please consult the following references:

Bartels, R. M., & Gannon, T. A. (2011). Understanding the sexual fantasies of sex offenders and their correlates. *Aggression and Violent Behaviour, 16*(6), 551-561. Elsevier Ltd. doi:10.1016/j.avb.2011.08.002

Leitenberg, H., & Henning, K. (1995). Sexual fantasy. *Psychological Bulletin*, *117*(3), 469-96. Retrieved from <a href="http://www.ncbi.nlm.nih.gov/pubmed/7777650">http://www.ncbi.nlm.nih.gov/pubmed/7777650</a>

Prentky, R., Burgess, A. W., Rokous, F., Lee, A., Hartman, C., Ressler, R., & Douglas, J. (1989). The presumptive role of fantasy in serial sexual homicide. *The American Journal of Psychiatry, 146*(7), 887-91. Retrieved from <a href="http://www.ncbi.nlm.nih.gov/pubmed/2787122">http://www.ncbi.nlm.nih.gov/pubmed/2787122</a>.

Williams, K. M., Cooper, B. S., Howell, T. M., Yuille, J. C., & Paulhus, D. L. (2008). Inferring sexually deviant behaviour from corresponding fantasies: The role of personality and pornographic consumption. *Criminal Justice and Behaviour*, *36*(2), 198-222. doi:10.1177/0093854808327277

If you have any concerns about the study, or if you are interested in additional information, please feel free to contact the primary investigator, Fiona Dyshniku, <a href="mailto:dyshnik@uwindsor.ca">dyshnik@uwindsor.ca</a>.

#### Please print this page for your reference.

If you wish to talk about any personal issues that arose during the course of your participation in the current study,

please contact any of the resources outlined below.

Site	Contact	Additional Information
Student Counseling Centre	519-253-3000 ext.4616	-On campus (located on top floor of the CAW) -Free to students
Distress Centre of Windsor/Essex County	519-256-5000	-Provides telephone counseling from 12 noon - 12 midnight, 365 days a year -Website: www.dcwindsor.com
Community Crisis Centre	519-973-4435	-Provides 24 hour crisis service -Walk-in service at Hotel-Dieu Grace Hospital ER -Website: http://windsoressex.cioc.ca/record/WIN0762
Canadian Mental Health Association	Downtown: 519-255-7440 Walker Rd: 519-971-0314 Leamington: 519-326-1620	-Website: http://www.cmha-wecb.on.ca/ -8:30am – 4:30pm (Monday – Friday)
Connex Ontario	1-866-531-2600	-Provides free and confidential health services information for people experiencing problems with mental health -Website: http://www.connexontario.ca/ and http://www.mentalhealthhelpline.ca/
Mood and Anxiety Treatment Program (at Windsor Regional Hospital)	519-257-5125	-Monday, Tuesday, Thursday and Friday 8:30am to 4:30pm -Website: http://www.wrh.on.ca/Site_Published/wrh_internet/RichText.aspx?Body.Queryld.ld=3286&LeftNav.Queryld.Categories=173

Community Resource List: Sites that provide assistance with sexual harassment, assault, and domestic violence				
Site	Contact	Additional Information		
Sexual Assault / Domestic Violence & Safe kids Care Centre	519-255-2234	-Provides medical treatment, documentation, safety planning, and referrals for victims of domestic violence -Provides medical treatment, documentation, testing, and referrals for victims of sexual assault -Emergency Service: 24 hours, 7 days a week through the Emergency DepartmentOffice: Monday – Friday 8:00 AM – 4:00 PM -Website: http://www.sacc.to/gylb/satc/CentreID=32.htm		
Sexual Assault Crisis Centre	519-253-3100	-Provides counseling to male and female victims of sexual victimization -Website: http://www.wincom.net/~sacc/		
Hiatus House	519-252-7781	-Provides services to individuals and families experiencing domestic violence) -Website: http://www.hiatushouse.com/		

## Appendix F

Table 1

Order of survey packages

Version A (males	Version B (males	Version C (females	Version D (females
only)	only)	only)	only)
VT Sadomasochism	VT Pedophilia	VT Sadomasochism	VT Pedophilia
VT Pedophilia	VT Sadomasochism	VT Pedophilia	VT Sadomasochism
CSA-IAT v1	CSA-IAT v2	CSA-IAT v2	CSA-IAT v1
RE-IAT v2	RE-IAT v1	RE-IAT v1	RE-IAT v2
BIDR	PORN use	BIS	I7
I7	MAI	PORN use	PORN use
BIS	RAPE scale	RAPE scale	MAI
MAI	BIS	SCS	NPI-16
SCS	ICMS	Modified MASA	BIS
ICMS	Modified MASA	NPI-16	SRP-SF
PORN use	SCS	SRP-SF	RAPE scale
RP	NPI-16	MAI	SCS
SRP - SF	I7	MOLEST scale	BIDR
MOLEST scale	SRP-SF	I7	Modified MASA
Modified MASA	RP	BIDR	MOLEST
RAPE scale	BIDR		
NPI-16	MOLEST scale		

## Appendix G

Table 1

Male and Female Items for the Fantasy Index (modified MASA)

Item	Male items	Female items
Origin		
MASA	1. Having a woman/ man or a girl/ boy	1. Having a woman/ man or a girl/
	in pain while I am having sex with her/	boy in pain while I am having sex
	him.	with her/ him.
Authors	2. Being raped	Being raped
MASA	3. Tying someone up and having sex	3. Tying someone up and having sex
Authors	4. Being hurt or injured during sex by	4. Being hurt or injured during sex by
	my partner	my partner
SFQ	5. Shocking a stranger by showing	5. Shocking a stranger by showing
	them my penis	them my vagina
SFQ	6. Rubbing a boy's penis.	6. Rubbing a boy's penis.
SFQ	7. Touching and kissing a boy/ girl.	7. Touching and kissing a boy/ girl.
Authors	8. Being bound (e.g. by rope, chains,	8. Being bound (e.g. by rope, chains,
	handcuffs, gags, etc.) or otherwise	handcuffs, gags, etc.) or otherwise
	made to suffer by my partner	made to suffer by my partner
MASA	9. How good it would feel to hurt	9. How good it would feel to hurt
	someone during sex.	someone during sex.
Authors	10. Being made to obey during sex	10. Being made to obey during sex
SFQ	11. Masturbating or having sex with	11. Masturbating or having sex with
	someone while I was wearing women's	someone while I was wearing men's
	clothing	clothing
SFQ	12. Making a woman/ man beg me to	
	stop as I fuck her/ him up the ass	12. n/a
MASA	13. Having sex with a child.	13. Having sex with a child.
MASA	14. Wearing women's/ men's	14. Wearing women's/ men's
	underwear.	underwear.
SFQ	15. Masturbating while people watch	15. Masturbating while people watch
	me.	me.
MASA	16. Feet or footwear	16. Feet or footwear
Authors	17. Getting raped or otherwise sexually	17. Getting raped or otherwise
	abused when sleeping	sexually abused when sleeping
MASA	18. Having a woman/ man tied to a bed	18. Having a woman/ man tied to a
	spread-eagle.	bed spread-eagle.
MASA	19. Secretly watching people having	19. Secretly watching people having
	sex.	sex.
MASA	20. Threatening or frightening a man/	20. Threatening or frightening a man/
	woman.	woman.
SFQ	21. Having someone humiliate me	21. Having someone humiliate me
	during sex	during sex

MASA	22. Having a man/ woman struggle	22. Having a man/ woman struggle
	during sex.	during sex.
Authors	23. Being a sexual submissive to	23. Being a sexual submissive to
	Master	Master
MASA	*24. Burning a woman/ man during	*24. Burning a woman/ man during
	sex.	sex.
SFQ	25. Having a girl touch or suck my	
	penis.	25. n/a
SFQ	26. Having sex with someone who's	26. Having sex with someone who's
51 4	wearing rubber or leather	wearing rubber or leather
MASA	27. Killing a woman/ man while having	27. Killing a woman/ man while
1417 157 1	sex with her/ him	having sex with her/ him
SFQ	28. Pinning a man/ woman down on the	28. Pinning a man/ woman down on
SI'Q	floor and fucking him/ her up the ass	the floor and fucking him/ her
Authora		
Authors	29. Training sex slaves	29. Training sex slaves
SFQ	30. Putting my finger inside a girl's	30. Putting my finger inside a girl's
A 41	vagina.	vagina.
Authors	31. Secretly watching someone urinate	31. Secretly watching someone
7.64.64	or defecate	urinate or defecate
MASA	32. Sexually touching a male/ female	32. Sexually touching a male/ female
	stranger in a crowd.	stranger in a crowd.
MASA	33. Exposing myself to a	33. Exposing myself to a
	stranger/strangers	stranger/strangers
SFQ	34. Wearing traditionally female	34. Wearing traditionally male
	clothing to get sexually excited	clothing to get sexually excited
SFQ	35. A boy giving me a blowjob or	35. A boy touching me sexually or
	jerking me off.	bringing me to orgasm.
Authors	36. Threatening to hurt if she/ he does	36. Threatening to hurt if she/ he does
	not submit to my sexual advance or	not submit to my sexual advance or
	demand	demand
MASA		37. Cutting a man/ woman with a
	37. Cutting a man/ woman with a knife.	knife.
Authors	38. Secretly watching someone who is	38. Secretly watching someone who
	naked	is naked
MASA	39. Watching someone undress, when	39. Watching someone undress, when
	they did not know it.	they did not know it.
SFQ	40. Raping a woman/ man during a	40. Sexually assaulting a woman/
31 4	gang rape	man during a gang rape
Authors	41. Being a Master in command of one	41. Being a Master in command of
114411015	or more sex slaves	one or more sex slaves
Authors	42. Being spanked/whipped by my	42. Being spanked/whipped by my
Aumois	partner during sex	
MACA	partiter during sex	partner during sex
MASA	43. Rubbing up against a male/ female	43. Rubbing up against a male/
	stranger in a sexual manner in a crowd	female stranger in a sexual manner in
MAGA		a crowd
MASA	44. Embarrassing or humiliating a man/	44. Embarrassing or humiliating a

	woman during sex (i.e. peeing on him/	man/ woman during sex (i.e. peeing			
	her, coming in his/ her face, calling	on him/ her, coming in his/ her face,			
	him/ her names, etc.)	calling him/ her names, etc.)			
Authors	45. Hurting someone to force them into	45. Hurting someone to force them			
	having sex with me	into having sex with me			
MASA	46. Whipping someone.	46. Whipping someone.			
SFQ	47. Holding a woman's/ man's head in	47. Holding a woman's/ man's head in			
	front of my penis and making him/her	front of my vagina and making him/			
	suck it against his/ her will	her lick it against his/ her will			
SFQ	48. Overpowering a man/ woman and	48. Overpowering a man/ woman and			
	forcing him/ her to have sex with me	forcing him/ her to have sex with me			
Authors	49. Engaging in erotic asphyxiation	49. Engaging in erotic asphyxiation			
	(e.g. self-hanging, strangulation,	(e.g. self-hanging, strangulation,			
	choking, or suffocation) either alone or	choking, or suffocation) either alone			
	with a partner	or with a partner			
Authors	50. Being a sex slave	50. Being a sex slave			
SFQ	51. Putting my fingers into a girl's/	51. Putting my fingers into a girl's/			
	boy's rear-end.	boy's rear-end.			
MASA	52. Strangling a woman/ man during	52. Strangling a woman/ man during			
	sex.	sex.			
MASA	53. Exposing my penis to a stranger/	53. Exposing my vagina to a stranger/			
	strangers	strangers			
SFQ	54. Handcuffing a man/ woman to a	54. Handcuffing a man/ woman to a			
	chair and having intercourse with him/	chair and having intercourse with			
	her	him/ her			

*Note:* Item 24 was accidentally left out of the survey. MASA = Multidimensional Assessment of Sex and Aggression; SFQ = Sexual Fantasy Questionnaire.

Table 2

Male and Female Items for the Behaviour Index (modified MASA)

<b>Item Origin</b>	Male items	Female items
MASA	1. I have become sexually excited by	1. I have become sexually excited by
	wearing women's clothing.	wearing men's clothing.
MASA	2. In a crowd, I become sexually	2. In a crowd, I become sexually
	excited by rubbing up against or	excited by rubbing up against or
	touching strangers.	touching strangers.
MASA	3. I have been sexually excited by	3. I have been sexually excited by
	embarrassing or humiliating someone.	embarrassing or humiliating someone.
MASA	4. I get sexual pleasure out of hurting	4. I get sexual pleasure out of hurting
	someone.	someone.
MASA	5. I have had sexual activity with a	5. I have had sexual activity with a
	child (12 or younger), when I was 16 or	child (12 or younger), when I was 16 or
	older.	older.

3.5.4.0.4	C 7.1	6 X 1 1 . 1			
MASA	6. I have gotten sexually turned on by	6. I have gotten sexually turned on by			
	smelling or feeling a woman's/ men's	smelling or feeling a woman's/ men's			
	underwear or shoes.	underwear or shoes.			
MASA	7. I have come while exposing my	7. I have come while exposing my			
	penis.	crotch.			
MASA	8. I have worn women's clothing or	8. I have worn men's clothing or tried			
	tried them on.	them on.			
MASA	9. I have come while beating someone.	9. I have come while beating someone.			
MASA	10. I have tied someone up while we	10. I have tied someone up while we			
	were having sex.	were having sex.			
MASA	11. I have hurt someone on purpose	11. I have hurt someone on purpose			
	during sex.	during sex.			
MASA	12. I have hurt a man/ woman while	12. I have hurt a man/ woman while			
	having sex with him/ her.	having sex with him/ her.			
MASA	13. I have come while threatening or	13. I have come while threatening or			
	frightening someone.	frightening someone.			
MASA	14. I have become sexually excited by	14. I have become sexually excited by			
	threatening or frightening someone.	threatening or frightening someone.			
MASA	15. I have secretly watched people	15. I have secretly watched people			
	having sex (not counting movies and	having sex (not counting movies and			
	sex shows).	sex shows).			
MASA	16. It has excited me more to hurt a	16. It has excited me more to hurt a			
	person physically than to have sex with	person physically than to have sex with			
	that person.	that person.			
MASA	17. I have masturbated while watching	17. I have masturbated while watching			
	someone secretly.	someone secretly.			
MASA	18. I have exposed my penis to a boy/	18. I have exposed my vagina to a boy/			
	girl or a man/ woman who did not	girl or a man/ woman who did not			
	know me.	know me.			
MASA	19. While having sex, I have tied up or	19. While having sex, I have tied up or			
1711 101 1	handcuffed someone.	handcuffed someone.			
MASA	20. I have enjoyed hurting a child	20. I have enjoyed hurting a child			
1711 101 1	during sex.	during sex.			
MASA	21. While having sex I have enjoyed	21. While having sex I have enjoyed			
1711 101 1	scaring my companion so that he/ she	scaring my companion so that he/ she			
	begged me to stop.	begged me to stop.			
MASA	22. While having sex, I have used	22. While having sex, I have used			
1417 157 1	handcuffs, whips, or leathers.	handcuffs, whips, or leathers.			
MASA	23. I have been sexually excited by	23. I have been sexually excited by			
1417 157 1	beating someone.	beating someone.			
MASA	24. I have beaten a man/ woman while	24. I have beaten a man/ woman while I			
1417 107 1	I was having sex with him/ her.	was having sex with him/ her.			
MASA	25. I have burned someone on purpose	25. I have burned someone on purpose			
WIASA		during sex.			
MASA	during sex.  26. I have really hurt a woman/ man or	26. I have really hurt a woman/ man or			
MASA	i i	,			
	girl/ boy physically during sex	girl/ boy physically during sex			

MASA	27. I have <i>threatened</i> to use physical	27. I have <i>threatened</i> to use physical
	force on a man/ woman or a boy/ girl	force on a man/ woman or a boy/ girl
	(saying I would hit, grab, hold, or hurt	(saying I would hit, grab, hold, or hurt
	him/ her) to make him/her go along	him/ her) to make him/her go along
	with: sex play (touching, feeling,	with: sex play (touching, feeling,
	kissing, or petting)	kissing, or petting)
MASA	28. I have <i>threatened</i> to use physical	28. I have <u>threatened</u> to use physical
	force on a woman/ man or a girl/ boy	force on a woman/ man or a girl/ boy
	(saying I would hit, grab, hold, or hurt	(saying I would hit, grab, hold, or hurt
	her/ him) to make her/ him go along	her/ him) to make her/ him go along
	with: attempted or completed sexual	with: attempted or completed sexual
	intercourse	intercourse
MASA	29. I have <i>threatened</i> to use physical	29. I have <i>threatened</i> to use physical
	force on a man/ woman or a boy/ girl	force on a man/ woman or a boy/ girl
	(saying I would hit, grab, hold, or hurt	(saying I would hit, grab, hold, or hurt
	him/her) to make him/her go along	him/ her) to make him/ her go along
	with: other sexual acts, such as oral or	with: other sexual acts, such as oral or
	anal sex	anal sex
MASA	30. I have <u>used</u> some physical force,	30. I have <u>used</u> some physical force,
	such as pinning a woman/man or a	such as pinning a woman/man or a
	girl/boy against a wall, grabbing	girl/boy against a wall, grabbing
	her/him, hitting her/him, holding	her/him, hitting her/him, holding
	her/him down, or hurting her/him to	her/him down, or hurting her/him to
	make her/him go along with: sex play	make her/him go along with: sex play
	(touching, feeling, kissing, or petting)	(touching, feeling, kissing, or petting)
MASA	31. I have <i>used</i> some physical force,	31. I have <u>used</u> some physical force,
	such as pinning a man/ woman or a	such as pinning a man/ woman or a
	boy/ girl against a wall, grabbing him/	boy/ girl against a wall, grabbing him/
	her, hitting him/ her, holding him/ her	her, hitting him/ her, holding him/ her
	down, or hurting him/ her to make him/	down, or hurting him/ her to make him/
	her go along with: attempted or	her go along with: attempted or
	completed sexual intercourse	completed sexual intercourse
MASA	32. I have <u>used</u> some physical force,	32. I have <u>used</u> some physical force,
	such as pinning a woman/ man or a	such as pinning a woman/man or a
	girl/ boy against a wall, grabbing her/	girl/boy against a wall, grabbing
	him, hitting her/him, holding her/him	her/him, hitting her/him, holding
	down, or hurting her/ him to make her/	her/him down, or hurting her/him to
	him go along with: other sexual acts,	make her/him go along with: other
	such as oral or anal sex	sexual acts, such as oral or anal sex

Note: MASA = Multidimensional Assessment of Sex and Aggression; SFQ = Sexual Fantasy Questionnaire.

### Appendix H

Table 1

Percentage of Male Participants Endorsing at Least One Item on the MASA Indices (n = 250)

	Fanta	ntasies Beh		iours	Fantasy-Behaviour intercorrelation	
Deviance Category	n	%	n	%	rho	r
Bondage	126	50.40	50	20.00	.50**	.50**
Exhibitionism	67	26.80	27	10.80	.42**	.55**
Object fetishism	91	36.40	38	15.20	.27**	.31**
Frotteurism	78	31.20	62	24.80	.53**	.64**
Masochism	138	55.20	n/a†	n/a†	n/a†	n/a†
Pedophilia	23	9.20	7	2.80	.18*	.27**
Rape	93	37.20	23	9.20	.27**	.28**
Sadism	148	59.20	71	28.40	.52**	.57**
Transvestism	16	6.40	43	17.20	.50**	.74**
Voyeurism	144	57.60	30	12.00	.30**	.32**
Any of above	205	82.00	140	56.00	.68**	.64**

*Note:* \*\*p < .01 (two tail), \*p < .05 (two tail). †Masochistic behaviours were not included in the questionnaire because acting on such fantasies would not constitute an illegal act.

Table 2

Percentage of Female Participants Endorsing at Least One Item on the MASA Indices (n = 152)

	Fantasies		Behaviours		Fantasy-Behaviour intercorrelation	
Deviance Category	n	%	n	%	rho	r
Bondage	72	47.40	29	19.10	.55**	.69**
Exhibitionism	45	29.60	15	9.90	.31**	.29**
Object fetishism	43	28.30	4	2.60	.25**	.27**
Frotteurism	36	23.70	21	13.80	.38**	.54**
Masochism	85	55.90	n/a†	n/a†	n/a†	n/a†
Pedophilia	3	2.00	1	.70	n/a	n/a
Rape	57	37.50	8	5.30	.36**	.45**
Sadism	61	40.10	35	23.00	.54**	.76**
Transvestism	11	7.20	12	7.90	.42**	.20**
Voyeurism	50	32.90	6	3.90	.34**	.62**
Any of above	107	70.40	61	41.10	.64**	.82**

*Note:* \*\*p < .01 (two tail). †Masochistic behaviours were not included in the questionnaire because acting on such fantasies would not constitute an illegal act.

### VITA AUCTORIS

Fiona Dyshniku was born in 1986 in Tirana, Albania. She attended Glendon College, York University, where she obtained a Bilingual Honours Bachelor of Arts degree in 2009, specializing in Psychology. She is currently a candidate for the Master's degree in Clinical Psychology (Adult Track) at the University of Windsor.