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Paraphilic Coercive Disorder: Behavioral Markers and Validity of Diagnostic Criteria

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ABSTRACT

The present dissertation aims to address the shortcomings in the current literature on Paraphilic Coercive Disorder (PCD) by focusing on two main objectives: assessing the validity of the diagnostic criteria proposed for inclusion in the DSM-5 and investigating behavioral markers. To this end, archival files of rapists who offended against adult women were studied. The thesis consists of three empirical articles. The first article presents a succinct account of some of the key results emanating from the analyses. The second article (N = 47) examines the observed frequencies of PCD and assesses the validity and impact of relying on minimum number of victims as a diagnostic criterion. Furthermore, a number of variables of interest are examined to determine predictors of sexual recidivism. The third article (N = 52) compares diagnostic groups on a number of offense conduct characteristics – specifically sexual acts and violent behaviors – in an attempt to identify behavioral markers associated with rape-proneness that could aid with the diagnosis of PCD. Similarly, rapist typologies were created by classifying the sample into groups of sex offenders based on their sexual acts, on one hand, and violent behaviors, on the other hand. Consequently, their characteristics and association with PCD were examined. Our results do not support the reliance on number of victims. Our findings suggest that rapists with PCD are more sexually intrusive and resort to less violence overall than sex offenders without such a diagnosis and that *exhibitionism* and *fondling* could serve as behavioral markers for PCD. Moreover, rapists with PCD are characterised more by *indecent request, exhibitionism, fondling, masturbation, attempted intercourse* and *digital penetration* rather than by *intercourse* and *sodomy.* In terms of violent behaviors, rapists with PCD resort less to the *use of weapons*, seem not to *hit their victims*, and are likely characterised more by *manipulation* rather than by the use of *death threats, excessive force* and *weapons*. In sum, the present study highlights the necessity of relying on a combination of assessment methods in order to improve diagnostic and discriminant validity of PCD.

Key-words: Paraphilic Coercive Disorder, victim count hypothesis, behavioral markers, rapist typology, rapists of adult women, Rape Index, sexual recidivism, DSM-5.

RÉSUMÉ

Le présent projet doctoral vise à considérer les lacunes dans la documentation scientifique sur le Trouble Paraphilique Coercitif (TPC) en mettant l'accent sur la validité des critères diagnostiques proposés pour inclusion dans le DSM-5 et les marqueurs comportementaux. À ce fait, les données archivées d'individus ayant sexuellement agressé des femmes adultes ont été étudiées. La thèse est constituée de trois articles empiriques. Le premier article présente des résultats clés découlant des analyses, élaborés dans les articles subséquents. Le second (N = 47) évalue les fréquences observées du TPC, la validité et l'impact du recours au nombre minimal de victimes comme critère diagnostique, ainsi que les indices prédisant la récidive sexuelle. Le troisième article (N = 52) compare les groupes diagnostiques sur une série de comportements délictuels, tels que les gestes sexuels et les comportements violents, dans le but d'identifier les marqueurs comportementaux associés avec la propension au viol qui pourraient assister dans le processus diagnostique. Dans le même ordre d'idées, nous avons créé des typologies de violeurs à partir des gestes sexuels commis, d'un côté, et des comportements violents, de l'autre côté. Conséquemment, les caractéristiques des typologies ainsi obtenues et leur association avec le TPC furent examinées. Dans l'ensemble, nos résultats ne soutiennent pas le recours au nombre de victimes. Nos données suggèrent que, globalement, les violeurs avec le TPC utilisent un niveau de gestes sexuels plus envahissant et un niveau de violence moindre que les violeurs n'ayant pas ce diagnostic, et que l'*exhibitionnisme* et l'*attouchement* pourraient servir de marqueurs comportementaux pour le TPC. En outre, les violeurs avec le TPC sont caractérisés davantage par *demande indécente, exhibitionnisme, attouchement, masturbation, tentative de pénétration* et *pénétration digitale* que par *pénétration vaginale* et *sodomie.* De plus, ces derniers font moins recours à l'*utilisation d'armes,* semblent ne pas *frapper/donner des coups à la victime* et sont caractérisés par la *manipulation* plutôt que par le recours aux *menaces de mort, force excessive* et *utilisation d'armes*. En somme, nos données soulignent la nécessité de s'appuyer sur une combinaison de méthodes d'évaluation afin d'améliorer la validité diagnostique et discriminante du TPC.

Mots-clés: Trouble Paraphilique Coercitif, l'hypothèse du nombre minimal de victimes, marqueurs comportementaux, typologie de violeurs, agresseurs sexuels de femmes adultes, Indice de Viol, récidive sexuelle, DSM-5.

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LIST OF ACRONYMS AND ABBREVIATIONS

ANOVA	Analysis of variance
AUC	Area under the curve
CÉRUM	Centre d'Études et de Recherche de l'Université de Montréal
DSM	Diagnostic and Statistical Manual of Mental Disorders
IV	Indice de Viol
MTC	Massachusetts Treatment Center: Rapist Typology
NOS	Not otherwise specified
OMS	Offender Management System
PCD	Paraphilic Coercive Disorder
PPG	Penile plethysmography
RI	Rape Index
ROC	Receiver Operating Characteristics
SSD	Sexual Sadism Disorder
SVP	Sexually violent predator
TPC	Trouble Paraphilique Coercitif
VIF	Variance inflation factor

"There are no absolutes when it comes to the human mind."

– Jason Gideon, *Criminal Minds*, s2, e13

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FOREWORD

The present doctoral thesis consists of five chapters in which the diagnostic criteria and behavioral markers of Paraphilic Coercive Disorder (PCD) are examined. PCD diagnosis is made using two sets of criteria: one was proposed for inclusion in the DSM-5 in 2010 and the other in 2012. Chapter I is an introduction to PCD. It focuses on historical debate surrounding PCD and the attempts to include it in the DSM, the role of deviant sexual interests in sexual offending, and potential problems associated with the assessment of PCD amongst sexual offenders who assault adult women. The aim of Chapter I is to help the readers better understand the challenges surrounding PCD, on one hand, and the pertinence of the present research project, on the other hand. Chapters II, III, and IV consist of articles that make up the core of the present thesis. Chapter V includes a general discussion. In this final chapter, the key results that are presented in the three empirical articles are surmised, their clinical and theoretical implications are discussed, and future directions are proposed.

Two authors have contributed to the writing of the articles presented in the thesis. The order of the authors is determined by their respective contributions, as noted by *American Psychological Association*. As a first author, my involvement in each step of the process that was required to bring this project to completion included extensive literature review, formulating method and research hypotheses, reading assessment reports for sex offenders and consulting other relevant sources of information to complement the available data, extracting data from the archival files and building the database, conducting statistical analyses, interpreting results, writing the manuscripts for publication and disseminating the research findings. Dr. Rouleau, Ph. D., as the director of the *Centre d'Études et de Recherche de l'Université de Montréal*, oversaw the completion of the research project and revised the manuscripts. The written authorization to include all three manuscripts in the present thesis was obtained from the co-author, Dr. Rouleau. Likewise, permission of Springer was obtained to include the first manuscript, published in the *Archives of Sexual Behavior*, in this dissertation. Finally, the authorization to present the present doctoral thesis in English was obtained.

CHAPTER I – INTRODUCTION

Literature Review

Paraphilias, Paraphlic Disorders, and DSM-5

The term *paraphilia* (from Greek, *para*, "beyond, amiss, altered"; *philia*, "love"; Money, 1990) was officially introduced in the *Diagnostic and Statistical Manual of Mental Disorders* in 1980 (DSM-III; American Psychiatric Association, 1980) to designate sexual deviations. In the DSM-5 (American Psychiatric Association, 2013), the most recent edition of the manual, the distinction was made between paraphilias and paraphilic *disorders* to highlight the fact that although having atypical sexual interests/behaviors is a necessary condition for having a parpahilic disorder, it is insufficient, thus making it possible for individuals to engage in consensual non-normative (paraphilic) sexual behaviors without being inappropriately labeled with a mental disorder. The basic structure of a paraphilic disorder requires that, for at least six months, the individual displays recurrent, intense sexually arousing fantasies, urges or behaviors involving primarily non-human objects, children or other non-consenting persons, or the suffering or humiliation of oneself or others (Criterion A). The person has either acted on these urges and/or they are a direct source of clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion B). The term *diagnosis* (i.e., paraphilic disorder) is used when both, Criteria A and B are met.

The DSM-5 contains eight specific paraphilic disorders which can be divided into two main categories based on *anomalous activity preferences* (Voyeuristic Disorder, Exhibitionistic Disorder, Frotteuristic Disorder, Sexual Sadism Disorder and Sexual Masochism Disorder) and *anomalous target preferences* (Pedophilic Disorder, Fetishistic Disorder and Transvestic Disorder). Additionally, "many dozens" of distinct paraphilias that are less commonly encountered have been identified (DSM-5, American Psychiatric Association, 2013, p. 685). Since DSM-III-R (American Psychiatric Association, 1987), these paraphilias have been placed in a residual category called *paraphilia not otherwise specified* (paraphilia NOS) which was replaced by *other specified disorder* category in the DSM-5. The DSM-5 does not provide individual, specific diagnostic criteria for these paraphilic activities nor does it specify how many such paraphilias exist although, arguably, their number and diversity is limited only by an individual's imagination to seek and enhance his or her sexual

gratification. These can range from troilism (observing partner having sex with another person) to necrophilia (corpses) and anything in between. In the DSM-5, it is pointed out that such paraphilias could, "by virtue of [their] negative consequences for the individual or for others, rise to the level of a paraphilic disorder" (p. 685).

It is to be noted that, as of today, rape is not considered to be a specific paraphilic disorder neither in the DSM-5 nor in the International Classification of Diseases (ICD-10; World Health Organization, 1992) used widely outside North America to diagnose a range of sexual disorders. Currently, the only diagnosis of paraphilic disorder that encompasses rape in the DSM-5 is Sexual Sadism Disorder (SSD), although sexual sadists constitute only approximately 5-10% of men who commit rape (Craissati, 2005). Numerous attempts were made to include rape in the diagnostic manual under the nomenclature of *Paraphilic Rapism* (DSM-III-R; American Psychiatric Association, 1987) and, more recently, *Paraphilic Coercive Disorder* (PCD). More precisely, during the preparatory phase of the DSM-5, the Task Force in charge of revising paraphilic disorders proposed the following set of PCD criteria for inclusion in the manual (American Psychiatric Association, 2010):

A. Over a period of at least six months, recurrent, and intense sexual arousal from sexual coercion, as manifested by fantasies, urges, or behaviors.
B. The person has clinically significant distress or impairment in important areas of functioning, or has sought sexual stimulation from forcing sex on three or more nonconsenting persons on separate occasions, and
C. The diagnosis of PCD is not made if the patient meets criteria for a diagnosis of SSD.

In 2012, PCD was rejected from the main body of the DSM-5. However, it was still considered for inclusion in Section III of the manual, reserved for diagnostic categories that require further study, with the following criteria (American Psychiatric Association, 2012):

A. Over a period of at least 6 months, an equal or greater arousal from sexual coercion than from consensual interaction, as manifested by fantasies, urges, or behaviors.
B. The person has acted on these sexual urges with a nonconsenting individual, or the sexual urges or fantasies cause marked distress or impairment in social, occupational, or other important areas of functioning.

C. The diagnosis of PCD is not made if the patient meets criteria for a diagnosis of SSD.
D. The individual is at least 18 years of age.

It must be pointed out that the minimum number of victims (Criterion B), set at 3 in 2010, was reduced to 1 in 2012. Ultimately, however, PCD was excluded from the main body of the DSM-5 as well as from Section III of the diagnostic manual. The recent fate of PCD adds to its long and controversial history which dates back to the 1980s. In fact, Zander (2008) notes that the debate surrounding PCD's status in the diagnostic manual is "rivaled only by the 1973 debate and rejection of another DSM paraphilia: homosexuality" (p. 467). It seems relevant to review some of the arguments, past and recent, for and against the inclusion of PCD in the diagnostic manual.

Historical Background of PCD

The validity and the reliability of PCD have been questioned numerous times, starting with the very first attempts to introduce the diagnosis in the DSM-III-R (American Psychiatric Association, 1987). All four propositions to include PCD in the diagnostic manual were rebuffed, including the most recent attempt (DSM-5; American Psychiatric Association, 2013). Some argue that PCD was excluded from the diagnostic manual more for political and ideological concerns, as well as possible legal ramifications, rather than for any available disconfirming empirical evidence about the validity of such a hypothesized subset of rapists (Fuller, Fuller, & Blashfield, 1990; Staver, 1986; Stern, 2010). Main arguments for and against PCD diagnosis are reviewed herein.

Feminists' opposition. The initial proposal to include the diagnosis of PCD in DSM-III-R met with strong political opposition from feminists (Kutchins & Kirk, 1997). By the mid 1980s, it was widely accepted that rape was a violent assault motivated by the rapist's desire for power and dominance rather than by sexual arousal. This concept was advanced in popular culture by Susan Brownmiller's best-selling book, *Against Our Will: Men, Women, and Rape* (1975). In her book, Brownmiller argues that rape is "nothing more or less than a conscious process of intimidation by which all men keep all women in a state of fear" (p. 15). Set against this backdrop, the level of opposition from feminists was comprehensible. From the feminist perspective, the idea that rape might be linked to a pathological condition was unacceptable.

Recognizing that the act of rape is a mental illness, such as PCD, would go against the idea that sexual aggression is a conscious process of intimidation. A step in this direction could attenuate the rapist's personal responsibility for committing rape by attributing some responsibility to the mental illness.

Early theories of sexual offending. The feminist view whereby sexual assault is a demonstration of a man's power and dominance found echo in the early psychodynamic approaches to sexual offending. For example, Groth, Burgess and Holmstrom (1977) categorized sexual offenders based on the main factors hypothesized to motivate their actions, such as power and anger. They noted that sex itself was never the dominant issue during the assault and that instead, sexuality was used to express other needs, such as power and anger. However, Groth (1979) later proposed a third category of rapists, sadistic rapists, who were thought to derive sexual gratification from the suffering and humiliation that the victim experiences. The author estimated that sadistic rapists represented the minority of sex offenders (5.00%), whereas power and anger rapists represent roughly 55.00% and 40.00%, respectively.

Justice system and civil liberties consequences. Similar to concerns raised by feminists, the proposal to include PCD in the DSM-III-R met with opposition from the U.S. Department of Justice, arguing that the diagnosis would be used by criminal defendants to avoid, or lessen legal responsibility in criminal prosecutions for rape (Kutchins & Kirk, 1997). The American Academy of Psychiatry and the Law and other groups also opposed it, arguing that defendants could seek an insanity defense (Kutchins & Kirk, 1989). The most recent attempts to include PCD in the DSM-5 focused concerns on the civil liberties consequences. One type of litigation in which the DSM plays a significant role is the civil commitment of Sexually Violent Predators (SVP) (Stern, 2010). In 1990, the state of Washington passed the first sexually violent predator involuntary commitment statute (First & Halon, 2008). Since then, 20 American states have enacted SVP laws (Stern, 2010). The SVP laws are intended for sex offenders who completed a mandatory prison sentence for a crime of sexual violence (First & Halon, 2008; Zander, 2008). The state could then petition to have them civilly committed and confined preventively in prison-like treatment facilities, such as psychiatric hospitals, for an indeterminate time.

To be eligible for SVP laws, it is required that the individual has a prior history of criminal sexual activity, *plus* a mental abnormality or personality disorder that specifically causes sexually violent behavior, that the person has great difficulty controlling his sexually violent behavior (volitional impairment) and is at risk of reoffending (dangerousness) if not confined to a secure facility (First & Halon, 2008; Stern, 2010). Because paraphilias focus directly on psychopathological features of deviant sexual behavior (American Psychiatric Association, 1999, p. 9), they are most commonly used to fulfill the legal requirements of the mental abnormality (First & Halon, 2008). A concern that has been raised is that an official diagnosis for PCD could lead to SVP laws being misused to confine sexual offenders indefinitely (Frances, 2010b).

Despite such concerns, the APA notes that paraphilic diagnoses are absent in most sex offenders (American Psychiatric Association, 1999, p. 9), and that a mere presence of a diagnosis of paraphilia, such as PCD, does not provide information on how likely an individual is to sexually reoffend, nor that there is volitional impairment, which are all required elements of the SVP laws (First & Halon, 2008). These strict requirements mean that only a small number of sex offenders released from prison each year are even considered for SVP assessment (Stern, 2010). For instance, in the 6 year period since the Washington State SVP statute came in effect, of the 5.00% of all sex offenders released from custody who met the statutory criteria for SVP commitment, only 1.53% were accepted by prosecutors to be filed for an SVP petition (Milloy, 2003).

Moreover, the PCD supporters point out that those who would potentially meet the diagnostic criteria of PCD are not being ignored by the SVP laws; they are subjected to SVP laws under the diagnostic category of paraphilia NOS with a *non-consent* or *rape* descriptor (Stern, 2010). In fact, at 42.6%, the second most prevalent diagnosis among men subject to SVP commitment laws, after pedophilia, is paraphilia NOS rape or non-consent (Jackson & Richards, 2007). Whereas Frances (2010a) argues that making PCD an official diagnostic category would "expand the pool of sex offenders who are eligible for indefinite civil commitment", Stern (2010) maintains that the addition of PCD will help attain a greater clarity and reliability. A precise description would also permit to abandon the paraphilia NOS designation in favor of the more defined and specific PCD diagnosis and would help protect

potential SVPs from a more general diagnosis (Stern, 2010). By doing so, it will not only promote the diagnostic accuracy that First and Halon emphasize but also shrink the pool of potential SVP candidates instead of expanding it (Stern, 2010). But of course, before including PCD in the DSM, valid and reliable criteria are required.

Some argue that paraphilia NOS, rape or non-consent, is not to be used at all for perpetrators of a sexual offense (see Zander, 2008). The rationale provided for this argument is that PCD was rejected from the DSM and, therefore, the intent of the drafters of the DSM cannot be to allow its inclusion in either paraphilia NOS (American Psychiatric Association, 2000) or, by extension, in other specified paraphilic disorders (American Psychiatric Association, 2013). Moreover, since DSM-IV (American Psychiatric Association, 1994), all versions of the diagnostic manual include new conditions that target perpetrators of sexual coercion and rape that are placed under the chapter "other conditions that may be focus of clinical attention". Two such conditions that involve the use of physical force or psychological coercion to engage the other person in sexual acts are found in the DSM-5 under "Adult maltreatment and neglect problems" section, specifically *Spouse or partner violence, sexual* (p. 720) and *Adult abuse by nonspouse or nonpartner* (p. 722) (American Psychiatric Association, 2013). Based on the diagnostic manuals, these conditions are not considered mental disorders but can nevertheless be a "focus of clinical attention" (DSM-IV-TR, American Psychiatric Association, 2000, p. 731; DSM-5, American Psychiatric Association, 2013, p. 715). Zander (2008) argues that the inclusion of these rape-related designations under "other conditions that may be focus of clinical attention" serves as further evidence that non-sadistic rapists were meant to be excluded not only from specific paraphilic disorders, but also from the entire classification of mental disorders.

Unfortunately, the intention of the DSM drafters in regards to PCD is open to debate and interpretation. The fact that conditions included in the section on "Adult maltreatment and neglect problems" are not mental disorders but rather conditions that merit "focus of clinical attention" does not automatically annihilate the existence of PCD. These so called "conditions" that merit "focus of clinical attention" can encompass men who sexually abuse either partners or non-partners for motives such as opportunity, anger or vindictiveness (see Knight, 1999) as opposed to being driven by a paraphilic pattern of sexual arousal. Even

Frances (2011), who argues adamantly against the inclusion of PCD in the DSM, does not deny the existence of a small subgroup of rapists who would meet the criteria of PCD; however, due to the real possibility of misuse of the diagnosis in legal context, either intentionally or unintentionally, he argues against its inclusion in the diagnostic manual.

It must be noted that our intention is not to insist on the inclusion of the diagnosis of PCD in the DSM. Rather, our intent is to better our understanding of PCD regardless of its status in the diagnostic manual. Nevertheless, we do recognize that the absence of PCD in the DSM and its *repeated* rejection from the manual can lead to the impression that PCD is invalid (e.g., Zander, 2008) in spite of the evidence to the contrary (e.g., see section on *Clinical and Empirical Evidence for PCD*, which follows immediately). Furthermore, the absence of PCD in the DSM makes the work of researchers more difficult (Frances, 2011), on one hand, and hinders access to specialized treatment for sex offenders, on the other hand. We are faced with a paradox whereby the diagnosis of PCD is excluded from the DSM for the lack of information on the disorder (e.g., precise criteria, prevalence rates) and, conversely, the advancement of knowledge is thwarted by the very absence of the diagnosis from the manual.

Clinical and empirical evidence for PCD. Despite political, legal and ideological arguments against PCD, substantial evidence indicates that rapists constitute a markedly heterogeneous population (Knight & Prentky, 1990) and motivations to sexually offend vary greatly (e.g., Knight, 1999; Lalumière, Harris, Quinsey & Rice, 2005; Lalumière & Quinsey, 1993; Thornton, 2010). The Massachusetts Treatment Center: Rapist Typology (MTC; Knight & Prentky, 1990) is currently the most empirically based typology for sexual offending (Bartol & Bartol, 2008). In its third, revised version (MTC: R3), Knight (1999) has identified four major types of rapists based on their primary motivation for sexual aggression, which includes opportunity, pervasive anger, vindictiveness, and sexual gratification. The sexual gratification type is further subdivided into sadistic and non-sadistic subtypes, whose motivation to sexually offend is hypothesized to be sexual or, in other words, marked by a presence of long lasting sexual or sadistic fantasies and enduring sexual preoccupation. Rapists with a purported PCD may potentially fall within the non-sadistic sexual category of MTC: R3.

Similarly, in their early work, Freund, Seeley, Marshall, and Glinfort (1972) documented that a small group of men exists who show a "deviant rape pattern" (p. 357). For this subset of rapists, called *preferential types*, deviant sexual arousal seems to play a motivational role for sexual offending. Moreover, preferential rapists are distinguished from sadistic rapists; the former group is said to be less severe than the latter, or true sadism (Freund, Scher, Racansky, Campbell, & Heasman, 1986). Other researchers have also documented a category of rapists with a paraphilic interest in rape (e.g., Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Money, 1984, 1999). Abel and Rouleau (1990) found that recurrent, repetitive, and compulsive urges and fantasies to commit rapes, as well as other characteristics relevant to paraphilic disorders (distress, impairment in functioning) were frequently reported by a large number of individuals in clinical settings. Consequently, they have argued that DSM should include a diagnostic category for non-sadistic rapists.

Overall, it seems that the rejection of PCD from the diagnostic manual was heavily motivated by political, ideological and legal concerns as well as the preliminary nature of the data – including lack of information about its prevalence – rather than any disconfirming evidence as to its existence (e.g., Fuller et al., 1990; Staver, 1986; Stern, 2010). In fact, Berlin (1986) has criticized the decision of the APA Board to reject PCD as "a conscious effort to leave out the fact that some men rape as a consequence of being turned on by the coercive rather than the sadistic elements of rape" (p. 4). A close inspection of clinical and empirical data suggests that underlying deviant sexual interests play a crucial role in the sexual offending process of men who are said to be sexually motivated. The role of deviant sexual interests is reflected in prominent theories of sexual offending and will be reviewed herein.

The Role of Deviant Sexual Interests in Sexual Offending

McGuire, Carlisle and Young (1965) proposed that deviant sexual interests play a key role in the development and maintenance of problematic sexual behavior. Deviant sexual interests are thought to be a result of learning. More specifically, McGuire and his colleagues propose that an initial association between a deviant stimulus and a state of sexual arousal is consequently reinforced through the pairing of masturbatory activities with an orgasmic response. As such, deviant sexual interests emerge above other sexual interests and take a

form of sexual preference. This proposal has evolved into the *sexual preference hypothesis* (Lalumiere & Quinsey, 1994). As of today, sexual preference hypothesis can take at least three forms (Marshall & Fernandez, 2003). The *strong* form proposes that engaging in offensive behaviors, which are driven by deviant preference for coercive over consensual sex, is preferred over all other possible sexual behaviors, whereas the *moderate* form proposes that sex offenders find their deviant and normative sexual activities equally appealing. The *weak* version requires only that the sex offender fails to be inhibited by cues that might otherwise prevent him from offending (e.g., cues of non-consent), and therefore deviant sexual interests can be lower than normative sexual interests. Regardless of the form, men committing rape have higher levels of deviant sexual interests than men who have never shown such behaviors. Moreover, deviant sexual interests are thought to have become entrenched prior to the initial deviant act (e.g., Marshall, Barbaree & Eccles, 1991).

Albeit to varying degrees, sexual preference hypothesis has been incorporated into a number of comprehensive theories of sexual offending including *integrated theory* (Marshall & Barbaree, 1990), *confluence model* (Malamuth, Sockloskie, Koss & Tanaka, 1991), *integrated theory of sexual offending* (ITSO; Ward & Beech, 2006) and *quadripartite model* (Hall & Hirschman, 1991). In their integrated theory, Marshall and Barbaree (1990) portray sexual offending as the outcome of a number of interacting distal and proximal developmental, biological, psychological, social, cultural and situational factors. They postulate that sex and aggression share a common neurological basis, and that men have to learn to discriminate between the two to avoid the fusion of aggression into their sexual behavior. Individuals with pre-existent antisocial behavioral patterns (Knight, Prentky, Schneider, & Rosenberg, 1983) or a history of adverse childhood experiences (e.g., inconsistent, frequent and severe punishment; Rada, 1978) may more readily fuse sex and aggression, especially during adolescence when one is most receptive to acquiring enduring sexual scripts, preferences, interests and attitudes (Marshall & Barbaree, 1990). However, even males who successfully manage to discriminate between sexual and aggressive impulses, and restrain from acting out aggressively, may lose the ability to control their behavior under the influence of strong situational factors (e.g., stress, anger, sexual stimuli, intoxication), leading to a sexual offense.

Malamuth and colleagues (1991), in their confluence model of sexual aggression against women, postulate that hostile home experiences in childhood affect delinquency which, in turn, can lead to aggression through two pathways: (a) hostile attitudes and personality, and (b) sexual promiscuity (preference for impersonal sex with many partners). They further state that sexual promiscuity and hostile masculinity interact to produce sexual aggression. Dismissive attachment, found to be quite prevalent in rapists (Ward, Hudson, & Marshall, 1996), is thought to foster not only disinterest in closeness, but also interest in high levels of uninvolved sex (i.e., sexual promiscuity). Additionally, general hostility, hostility directed towards women, and violence-supportive attitudes present risk factors for rape.

In their quadripartite model of sexual abuse, which was specifically developed to explain rape of adult women, Hall and Hirschman (1991) propose that rape is based on four factors, or motivational precursors: physiological sexual arousal, cognitive distortions that serve to justify sexual aggression, affective dyscontrol, and personality problems. All four precursors are interrelated and they can affect intensity of one another, thereby increasing the likelihood in a given individual to commit a sexual aggression. However, it is proposed that one precursor usually exerts a driving force in a given individual. As such, based on this model, four subtypes of rapists exist, each corresponding to the relative prominence of each of the four motivational factors (i.e., the one with the lowest threshold) that causes the person to exceed the threshold that usually serves to inhibit sexually aggressive behavior in a specific set of circumstances.

The integrated theory of sexual offending (ITSO; Ward & Beech, 2006) is a unifying theory of the key concepts in existing theories of sexual offending to which biological and neuropsychological elements have been added. The authors postulate that three sets of causal factors – biological factors (i.e., genetic and evolutionary factors), proximal and distal ecological niche factors (i.e., social, cultural, physical and personal circumstances), and three core neuropsychological factors associated with various brain structures (motivation/emotional, perception and memory, and action selection and control) – interact continuously and dynamically and lead to sexual offending. When one or all neurological systems are compromised in some way, in interaction with other factors, they are likely to give rise to the clinical symptoms, including deviant arousal and self-regulation deficits that are

commonly observed among sex offenders and are thought to facilitate sexual offending. Even in the absence of psychological vulnerabilities, ecological variables can override normal psychological controls to facilitate sexually abusive behavior (i.e., combat situation). Once triggered, sexual offending will consolidate individual's vulnerabilities and will maintain or even escalate the offending behavior through a process of reinforcement. For instance, if sexual offending serves to reduce negative mood states, it is likely to negatively reinforce the maladaptive emotional regulation strategies utilized.

Overall, these multifactorial theories of sexual offending identify primary areas of difficulty in sex offenders (e.g., deviant arousal, self-regulation), the mechanisms by which they arise (e.g., adverse early childhood experiences), and how they interact to ultimately lead to sexually abusive actions. Three main themes emerge from theories of sexual offending and literature on rapists' typology. First, rapists represent a heterogeneous population. Second, deviant sexual interests play a central role in the offending process. Third, sexual offending against adult women is multiply determined; it follows that, for at least some sex offenders, deviant sexual interests are less relevant. In fact, for only a minority of rapists are deviant sexual interests relevant (e.g., Frances, 2011; Thornton, 2010).

The fundamental challenge for clinicians and researchers is how to reliably identify a small group of sex offenders whose primary motivation for rape is sexual – in our case, focused on *coercion*, and who would be given a mental disorder diagnosis – amid a large pool of heterogeneous rapists who are "simple criminals" (Frances, 2010b). It is noteworthy that data on prevalence rates of PCD are unavailable; the only data on prevalence rates of PCD are vague estimates cited by various sources (e.g., "vanishingly rare "black swan" rapist", Frances, 2011; *minority* of convicted rapists, Thornton, 2010). This lack of data can be partly explained by the repeated rejection of PCD from the DSM, whereby the absence of the paraphilic disorder in the DSM thwarts research in this area. This brings us to the DSM-5. Current accounts suggest that in the absence of compelling evidence supporting the presence of deviant sexual interests (Criterion A of the DSM), diagnostic decisions for PCD are frequently made on the basis of a mere presence of victims (Criterion B). Such practice is likely to be problematic and merits a closer examination.

Potential Problems Associated with DSM-5's PCD Criteria

In order to diagnose a paraphilic disorder in uncooperative patients with non-consenting victims (e.g., PCD, Voyeuristic Disorder, SSD), the Task Force has proposed that a threshold for minimum number of separate victims should be determined. The victim count was intended to vary for different paraphilias based on their level of similarity with normophilic activities. In other words, the greater the resemblance between paraphilic behavior and a potentially normophilic behavior, the more evidence should be required to conclude that the behavior is paraphilically motivated. The ultimate goal was to balance specificity and sensitivity for the diagnoses. For instance, sexual arousal from watching an unsuspecting individual in the nude is considered to be more likely in a typical male than from injuring struggling and terrified strangers. Within this frame of reference, the minimum victim count for PCD was set at 3 in 2010, for Voyeuristic Disorder it was also set at 3, whereas for SSD it was set at 2. However, it must be pointed out that the particular cut-point of 3 victims for PCD did not derive from any theory or practice (American Psychiatric Association, 2011), nor was it supported by any empirical research (First, 2010; Wakefield, 2011; Wollert, 2011).

Possibly the greatest appeal of using the number of victims for diagnostic purposes is that it is an objective, straightforward variable without any ambiguities associated with it, provided that the actual number of victims is known. However, the main problem associated with Criterion B is that it will be tempting to diagnose PCD solely on the basis of the presence or absence of a victim. In other words, as soon as a man commits one or several rapes, depending on the cut-point, Criterion B is met. In the absence of any compelling evidence supporting the presence of deviant sexual interests, it is possible to argue that if one commits rape – especially multiple rapes – then he must be driven by underlying fantasies of coercion or must be turned on by the coercive aspect of the sexual act. Such inferences are frequently made in sexual predator civil commitment proceedings. The validity problem with relying on the number of victims lies in the fact that rape can be committed for different motives (Knight, 1999; Prentky & Knight, 1991) which, like paraphilic motives, can give rise to "pseudo-paraphilic", repetitive behavior, "especially when certain environmental contextual considerations remain constant" (Wakefield, 2011, p. 204). For instance, given opportunities, a "normal" male may have multiple victims, another male with a paraphilic disorder may

victimize the same individual on multiple occasions while yet another individual may never act on his paraphilic fantasies or urges. As such, despite the irrefutable appeal of relying on number of victims as a criterion for PCD, a mere presence of multiple behaviors does not seem to be a valid indication of paraphilic disorder diagnosis (e.g., First, 2010; First & Halon, 2008; Wakefield, 2011). The diagnostic question is what the motivation for the act is, regardless of the frequency of its occurrence.

In addition to the potential problems associated with reliance on the number of victims, the current format of the diagnostic criteria for PCD seems to disregard the premise whereby sexually arousing fantasies and urges are among the "essential features" of paraphilias (DSM-IV; American Psychiatric Association, 2000, p. 566), which brings us to the Criterion A. The Criterion A of PCD (American Psychiatric Association, 2010, 2012), which targets the presence of sexual fantasies and urges focused on sexual coercion, has an added specifier: "or behaviors". The intention is that behaviors, like urges and fantasies, will serve as evidence of a deviant arousal pattern. In forensic settings, where one rarely, if ever, freely reports underlying motives for rape, objective markers, such as types of behaviors, can be valuable sources of evidence for a deviant sexual arousal pattern. However, in its current form, a mere presence of a victim is taken as evidence of both, Criterion B (number of victims) and Criterion A (behavior), making the diagnosis of PCD possible. In other words, the current wording of Criterion A seems to render the presence of deviant sexual interests and urges – essential features of paraphilic disorders – obsolete when, in fact, they should exist independently of specific observable actions, such as number of victims. Overall, the proposed criteria for PCD and their current interpretation seem to blur the lines between criminal act and mental disorder and could lead to a large number of misdiagnoses (First, 2010; Wakefield, 2011).

In summary, sexual offending is committed for numerous reasons. Only when sexually deviant interests are at play in the sexual offending process can a diagnosis of a paraphilic disorder, such as PCD, be considered. It is well established that not all sexual offending is sexually motivated. Even among rapists who are sexually motivated to commit rape, a proportion is more accurately characterized by *sexual sadism* than by *sexual coercion*. In other words, not all rapists – even sexual rapists – would meet a PCD diagnosis. The (exclusive) reliance on the number of victims does not seem justified to conclude that a paraphilic

disorder is present unless there is empirical evidence to indicate otherwise. In order to diagnose a PCD, it must be documented that deviant sexual fantasies and urges focused on coercion drive sexual offending.

Assessment of Deviant Sexual Interests

Penile plethysmography. The assessment of sexual offenders is a complex process. It requires a full psychological evaluation, an examination of police reports and available criminal history (e.g., number and nature of crimes committed) and, whenever possible, the corroboration of any information obtained from the offender by collateral sources (Coric et al., 2005). Given the central role that deviant sexual interests occupy in paraphilic disorders, their presence is commonly investigated. Deviant sexual interests are assessed by self-report measures (questionnaires, card-sort procedures), viewing time or penile plethysmography (PPG). The latter is the most widely used method and has the advantage of relying less on the offender's willingness to self-disclose (Barker & Howell, 1992; Coric et al., 2005; Lalumière, Quinsey, Harris, Rice, & Trautrimas, 2003; Thornton, 2010). A PPG measures the volumetric or circumferential erectile changes while the individual is exposed to visual or audio stimuli with sexual or non-sexual content. Sexual stimuli often constitute categories depicting diverse themes, such as a forced and consenting sex. The rationale behind the use of PPG is that penile tumescence to deviant material, such as rape, is indicative of underlying paraphilic interests (Rempel & Serafini, 1995) which, in turn, are thought to either determine or play an essential role in deviant sexual activities (Marshall & Fernandez, 2003).

A relative arousal to coercive stimuli as opposed to consenting stimuli, referred to as Rape Index (RI), has been the variable of particular interest when studying PCD. Looking at *relative* arousal rather than at arousal to a single category of stimuli allows for meaningful comparisons between participants and enhances the discriminant validity between different groups (Harris, Rice, Quinsey, Chaplin, & Earls, 1992). Numerous studies have supported the ability of phallometric assessment of sexual preferences to discriminate men based on prior sexual antecedents (i.e., rapists from non-rapists; e.g., Abel, Barlow, Blanchard & Guild, 1977; Barbaree, Marshall, & Lanthier, 1979; Hall, Shondrick & Hirschman, 1993; Harris et al., 1992; Quinsey, Chaplin, & Upfold, 1984). A relationship between men's sexual arousal to

depictions of sexually coercive material and their propensity to rape (Malamuth, 1981; Seto & Kuban, 1996), as well as a positive correlation between deviant sexual interests and sexual recidivism has also been documented (e.g., Hanson & Bussière, 1998; Harris et al., 1992; Quinsey, Rice & Harris, 1995). Similarly, among community men with no official record of sexual offending, the self-report of engaging in sexually coercive behavior (e.g., Bernat, Calhoun, & Adams, 1999; Lohr, Adams, & Davis, 1997; Thornton, 2010) and fantasy (Malamuth, Check, & Briere, 1986) seems to be substantially correlated with preferential arousal to rape as opposed to consensual sex. Malamuth (1986) has found RI to be the strongest correlate of self-reported sexual coercion. Moreover, among non-convicted individuals, RI has been shown to be related to self-reported willingness to engage in coercive sexual behavior if they believe that they will not be caught (Thornton, 2010). Overall, the RI data show that the average profile for convicted rapists is a roughly equal responsiveness to rape and consensual themes (Lalumière et al., 2003; Thornton, 2010; Willmot & Hart, 1996) whereas the average profile for non-sex offenders has been a clearly greater arousal to consenting than to coercive stimuli (Abel et al., 1977; Barbaree, Marshall & Lanthier, 1979; Lalumière et al., 2003; Quinsey & Chaplin, 1984). RI is the variable that most consistently and maximally distinguishes rapists, as a group, from other groups of men (e.g., Lalumière & Harris, 1998; Lalumière & Rice, 2007).

Overall, PPG is considered to be the gold standard for the assessment of sexual interests in sex offenders. There are undeniable advantages of relying on PPG data especially given that sex offenders are not generally forthcoming about their motives for sexual offending due to potentially negative lifelong consequences. Phallometric results are commonly used to guide treatment, assess treatment effectiveness and predict likelihood of recidivism (Marshall & Fernandez, 2000). For instance, the presence of deviant responses on phallometry helps identify treatment needs. Nevertheless, it is possible for an individual to display either normative or low phallometric response rates that are not easily interpretable. In such cases, the phallometric evaluation does not help advance our understanding of the individual's needs or problems in relation to sexual offending. An individual with a normative or low penile response may have deviant sexual interests but has suppressed them successfully during phallometric assessment or his offending may not be sexually motivated. As such,

complementing phallometric measures with other assessment methods, such as examination of behavioral markers empirically related to rape-proneness, is necessary regardless of the results obtained during phallometric assessments (McGovern, 1991). Furthermore, combining different sources of information, such as physiological and behavioral manifestations of deviant sexual interests, will better reflect the multidimensional nature of sexual arousal (Marshall & Fernandez, 2003) and consequently, will allow a more comprehensive and accurate assessment of PCD.

Behavioral markers of PCD. Given the difficulties that clinicians and researchers face in identifying rapists with PCD amid a heterogeneous pool of sex offenders, a number of researchers have turned to examine crime scene information – such as offender and offense characteristics – to uncover behavioral markers associated with rape-proneness. Unfortunately, most of the extant research focuses on sexual sadism (e.g., Dietz, Hazelwood, & Warren, 1990; Marshall & Kennedy, 2003). Although there is a slow, growing body of literature comparing sadistic sex offenders with non-sadistic sex offenders (e.g., Barbaree, Seto, Serin, Amos & Preston, 1994; Gratzer & Bradford, 1995; Marshall, Kennedy & Yates, 2002), only a few have specifically addressed PCD (e.g., Doren, 2002; Richards & Jackson, 2011; Zinik & Padilla, 2010).

On one hand, researchers examining sexual acts have reported a relationship between rape and a number of atypical behaviors, especially hands-off offenses, such as exhibitionism (Gebhard, Gagnon, Pomeroy, & Christenson, 1965; Simon, 2000; Stermac & Hall, 1989). Moreover, Freund and Seto (1998) have proposed that the presence of another paraphilia, especially engaging in exhibitionistic activity, may be a useful behavioral marker for preferential rape, notably because exposing one's genitals to a stranger is rare in control groups (Freund, 1990). Freund (1990) has further advanced that preferential rape, along with voyeurism, exhibitionism, and frotteurism/toucherism, is an expression of a common underlying disturbance in a normal courtship process in males. This proposition is known as courtship disorder hypothesis. Freund and Kolarsky (1965) proposed that a normal sequence of human sexual interactions that precede and initiate sexual intercourse is part of a system that consists of four phases: "(1) a *finding phase*, consisting of locating and appraising a potential partner; (2) an *affiliative phase*, characterized by nonverbal and verbal overtures such

as looking, smiling, and talking to a potential partner, (3) a *tactile phase*, in which physical contact is made; and (4) a *copulatory phase*, in which sexual intercourse occurs" (p. 113). In case of paraphilic disorders, some phases of the courtship process are entirely omitted or only minimally expressed, with an emphasis on a virtually instant conversion of sexual arousal into orgasm (Freund & Kolarsky, 1965). This differs from a normal courtship process where a substantial degree of flexibility is observed (e.g., pre-tactile interaction can be reintroduced after tactile interaction or after intercourse) (Freund, 1990). As such, voyeurism, exhibitionism, frotteurism/toucherism, and preferential rape are seen as distortions or extreme intensifications of the finding, affiliative, tactile and copulatory phases, respectively (Freund & Seto, 1998).

Moreover, research shows that paraphilic disorders tend to co-exist (Abel, Becker, Cunningham-Rathner, Mittelman & Rouleau, 1988), which is especially true for courtship disorders (Freund, 1990; Freund, Seto, & Kuban, 1997; Freund & Watson, 1990). Examining a sample of rapists with a diagnosis of rape paraphilia (n = 126), Abel and colleagues (1988) have reported that 27.0% had only one diagnosis of paraphilic disorder whereas the average number of paraphilic disorders in the group was estimated at 3.3. These included, but were not limited to, a history of exhibitionism (27.78%) and frotteurism (11.11%). Overall, these findings seem to support the theory of courtship disorder and suggest that paraphilic disorders that constitute it may be etiologically related (Freund, Scher, & Hucker, 1983), and that exhibitionism may serve as a behavioral marker for preferential rape (Freund & Seto, 1998). In this line of research, Doren (2002), as well as Zinik and Padilla (2010), have proposed a number of items to help with the diagnosis of PCD. These include the presence of clear signs of sexual arousal (such as ejaculation), raping while having cooperative sexual partners, heterogeneity in victim type, driving around in search for victims, stereotyped rituals and self-reports of coercive sexual fantasies with masturbation. However, it must be pointed out that research is still in its infancy and validation studies are lacking (but see Watson, 2013).

On the other hand, researchers examining aggressive/violent behaviors in association with PCD have shown that the use of weapons is associated with sadistic as opposed to non-sadistic sexual rapists using Knight's (1999) MTC: R3 classification system (Barbaree, Seto, Serin, Amos & Preston, 1994), whereas infliction of a facial injury is significantly associated with

PCD rather than SSD (Richards & Jackson, 2011). Based on the available literature, it can be easily observed that PCD is commonly discussed in relation to SSD. Precisely, a lot of care is taken to point out that the two are distinct entities (e.g., Harris, Lalumière, Seto, Rice & Chaplin, 2012). This distinction is also reflected in the criteria for PCD that were proposed for inclusion in the DSM-5 whereby SSD was presented as an exclusion criterion (Criterion C). Nevertheless, there is yet no firm consensus as to whether the distinction between the two is categorical or a matter of degree (e.g., Doren, 2002; Knight, 2010). Despite this fact, there is a general agreement that, for an individual with a hypothesized PCD, it is the element of coercing an unwilling person to engage in sexual activity that is sexually arousing as opposed to the humiliation, physical and/or psychological suffering that the victim experiences, which is a distinctive feature of SSD. Although the act of rape also involves the use of force, and that the victim may experience distress and humiliation, an offender with PCD would use force only in the amount necessary to restrain the victim and bring the sexual assault to completion (i.e., violence is instrumental). As such, a coercive rapist, as opposed to a sadistic rapist, would not subject the victim to any additional, "unnecessary" harm. Whether PCD and SSD are distinct categories or part of the same continuum, the use of violence – albeit to varying degrees and potentially serving different purpose – is characteristic to both types of rapists. Given that aggression is a common feature of sexual assault (Barbaree, Hudson, & Seto, 1993; Groth et al., 1977), it is relevant to take it into consideration when studying sexual offending.

In summary, relatively little work has been conducted to examine the characteristics of preferential rapists as opposed to other offender groups, such as child sex offenders or sexual sadists. This could be explained, at least partly, by the repeated rejection of PCD from the DSM, which undoubtedly hinders research on this paraphilic disorder. Given the scarcity of the available information, notably on the prevalence rates and behavioral markers of PCD, controversial nature of PCD, its frequent use in clinical and legal settings, and the difficulties that clinicians have in identifying a small group of rapists with PCD, it is essential to further explore this construct in order to better understand its nature.

Thesis Presentation

Objectives of the Thesis

The present thesis aims to offer empirically based evidence to evaluate deviant sexual interests focused on sexual coercion and to ultimately better our understanding of PCD. To that end, we conducted two main studies focusing on two key objectives: assessment of the validity of PCD criteria that were proposed for inclusion in the DSM-5 and investigation of behavioral correlates of PCD. More specifically, in the first study, we evaluated whether the Criterion B, or *minimum number of victims* (1 vs. 3), offers a valid means of assessing the presence of PCD. In the same line, we examined the link between number of victims and deviant sexual interests, as measured by PPG. It is to be noted that sex offenders in the present study were diagnosed with PCD based on the two sets of PCD criteria that were proposed for inclusion in the DSM-5 in 2010 and in 2012. The main distinction between the two sets was the minimum number of victims specified in Criterion B, set at either 1 or at 3 in years 2012 and 2010, respectively. We further examined RI data to determine an ideal cut-point that would help discriminate between groups of sex offenders with deviant sexual interests with either ≥1 or ≥3 victims. Moreover, we examined rates of sexual recidivism in our sample and investigated total number of victims, RI, Static-99, Stable-2007 and combined measures of actuarial risk assessment tools in terms of their ability to predict sexual recidivism. Finally, we examined the observed frequencies of PCD in an attempt to address the lack of information in the literature on prevalence rates of the disorder. To the best of our knowledge, no study having directly examined the rates of PCD in a given sample of sex offenders, on one hand, and the validity of the victim count hypothesis, on the other hand, has been published to date. In the second study, we evaluated the behavioral markers of PCD. More precisely, all sexual acts and violent behaviors committed in the context of sexual assault by each participant were indexed and examined in an attempt to identify the correlates of rape-proneness. The overarching objective was to increase the diagnostic accuracy of a small group of rapists with an underlying PCD amid a large group of rapists without such a diagnosis.

Structure of the Thesis

CHAPTER II of the thesis will present the first article, *Paraphilic Coercive Disorder: An Unresolved Issue*, published in the journal *Archives of Sexual Behavior*. The article was produced following Dr. Zucker's call for commentaries (Zucker, 2013) on paraphilic disorders after DSM-5's much anticipated release in 2013. The first article presents a narrow focus on a number of key findings emanating from both of our studies and, as such, briefly addresses both of the main objectives cited in the previous section. The key findings were also presented at the 7th biennial conference, *Congrès International Francophone sur l'Agression Sexuelle* (CIFAS) (Agalaryan, Rouleau, Mongeau, Saumur, 2013). The first part of the commentary focuses on the validity of relying on the minimum number of victims (Criterion B) which differed in the two sets of PCD criteria that were proposed for inclusion in the DSM-5 in 2010 and 2012 (≥3 and ≥1, respectively; American Psychiatric Association, 2010, 2012). The second part of the commentary focuses on the behavioral markers associated with rape-proneness by examining 12 categories of sexual acts that were indexed for each participant across all his officially known sexual offenses. Types of sexual acts as well as the overall level of sexual intrusiveness are examined and compared across diagnostic groups that were constituted using the two sets of PCD criteria. Furthermore, the entire sample is classified into two groups of rapists on the basis of their sexual acts. Thereafter, their association with PCD is examined. It is to be noted that in addition to new data, the key results reported in the commentary are reprised and elaborated extensively in subsequent second (CHAPTER III) and third (CHAPTER IV) articles. The second article was submitted for publication to the *Archives of Sexual Behavior*.

CHAPTER III will present the second article, *Paraphilic Coercive Disorder: Assessing Observed Frequencies, Sexual Recidivism Data, and Validity of Diagnostic Criteria in a Sample of Rapists.* The introduction of the article highlights the current status of PCD, its continued use in legal and clinical settings despite the critiques directed at its validity and the need for consistent and valid criteria to diagnose PCD. Assessment methods for sex offenders and evidence for PCD within this population is reviewed, and potential problems with DSM-5's proposed PCD criteria are highlighted. First, the study assesses what percentage of men convicted of sexually assaulting adult women meets the diagnosis of PCD using 2010 and

2012 PCD criteria proposed for inclusion in the DSM-5. Second, we investigate whether the reliance on a minimum number of victims (1 vs. 3) is a valid criterion for PCD and whether the minimum number of victims helps predict group membership. This aspect directly addresses the first main objective of our research project. Third, we examine the overall rates of sexual recidivism in our sample and which of the diagnostic subgroups were likely to sexually recidivate. Finally, we investigate number of victims, RI, and actuarial risk assessment data for their predictive value in sexual recidivism. Indirectly, the latter objective allows us to assess the value of relying on number of victims as a diagnostic criterion for PCD.

CHAPTER IV will present the third article, *Behavioral Markers of Paraphilic Coercive Disorder: Types of Sexual Acts and Violent Behaviors Committed in the Context of Sexual Assault.* The introduction of the third article highlights the challenges of identifying a small group of rapists with PCD amid a heterogeneous group of sex offenders. Behavioral markers associated with PCD and limitations in the extant literature are discussed. Consequently, in line with our second main objective, we investigated whether convicted sex offenders in our sample who met the diagnosis of PCD differ from sex offenders without such a diagnosis on the basis of offense conduct characteristics that have been commonly reported in the literature in connection with PCD, with a focus on sexual acts and violent behaviors. We further examine the diagnostic groups in their overall levels of sexual intrusiveness and severity of violence employed in the context of sexual assault. Finally, we explored a typology of sex offenders on the basis of rapists' sexual acts, on one hand, and violent behaviors, on the other hand, independently of their status on PCD. Subsequently, we examined the rapist typologies that were thus obtained in terms of their characteristics (age, number of victims, Rape Index and levels of sexual intrusiveness and violence) as well as their association with PCD diagnosis.

The final section, CHAPTER V, consists of an overview of the problem and general discussion of the results emanating from two studies, the limitations associated with our research, clinical and theoretical implications of the results and suggestions for future studies.

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CHAPTER II – FIRST ARTICLE

Paraphilic Coercive Disorder: An Unresolved Issue

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Abstract

Nineteen years after the publication of DSM-IV, the DSM-5 was published (American Psychiatric Association, 2013). For the fourth time since DSM-III (American Psychiatric Association, 1980), Paraphilic Coercive Disorder (PCD) was excluded from the main body of the DSM as well as from Section III (in the section on Conditions for Further Study). The repeated rejection of PCD from DSM contributes greatly to maintaining unanswered questions regarding this putative condition (e.g., sexual preference vs. disinhibition hypothesis, categorical vs. dimensional structure of PCD, lack of clear defining criteria). In this Commentary, we will focus on the B criteria that were proposed for PCD and we will examine the observed frequencies of PCD as well as behavioral markers (sexual acts) that may be characteristic of preferential sex offenders. We will conclude with our view on the matter.

Introduction

In 2010, the Task Force had proposed to set the threshold for number of victims at three in an attempt to balance specificity and sensitivity and improve the ability to discriminate sex offenders with and without PCD. At that time, the following "B" criteria for PCD could be read on the DSM-5 website: "The person has clinically significant distress or impairment in important areas of functioning, or has sought sexual stimulation from forcing sex on three or more non-consenting persons on separate occasions" (American Psychiatric Association, 2010) (see Table 1). However, this threshold of three victims did not stem from any theory or practice (American Psychiatric Association, 2011) nor was it supported by any empirical research (Wollert, 2011). As can be seen in Table 2, in 2012, the criteria for PCD were revised and the number of victims was replaced by one (American Psychiatric Association, 2012).

Table 1

The 2010 Criteria of Paraphilic Coercive Disorder Proposed for Inclusion in the DSM-5

A. Over a period of at least six months, recurrent, and intense sexual arousal from sexual coercion, as manifested by fantasies, urges, or behaviors.
B. The person has clinically significant distress or impairment in important areas of functioning, or has sought sexual stimulation from forcing sex on three or more nonconsenting persons on separate occasions, and
C. The diagnosis of Paraphilic Coercive Disorder is not made if the patient meets criteria for a diagnosis of Sexual Sadism Disorder.

Given the importance of identifying objective markers that could help correctly identify preferential sex offenders, one of the aims of our study was to test the victim count hypothesis. To our knowledge, no study having directly examined it has been published to date. Additionally, we investigated offense conduct characteristics in an attempt to identify behavioral markers related to rape-proneness and assist in the diagnosis of PCD.

Table 2

The 2012 Criteria of Paraphilic Coercive Disorder Proposed for Inclusion in the DSM-5

A. Over a period of at least 6 months, an equal or greater arousal from sexual coercion than from consensual interaction, as manifested by fantasies, urges, or behaviors.
B. The person has acted on these sexual urges with a nonconsenting individual, or the sexual urges or fantasies cause marked distress or impairement in social, occupational, or other important areas of functioning.
C. The diagnosis of Paraphilic Coercive Disorder is not made if the patient meets criteria for a diagnosis of Sexual Sadism Disorder.
D. The individual is at least 18 years of age.

Our Study

We examined the assessment reports of sex offenders referred to *Centre d'Études et de Recherche de l'Université de Montréal* (CÉRUM) for a phallometric evaluation of their sexual interests between the years 2000 and 2012. All sex offenders convicted for having sexually assaulted adult female victims (15 years of age and older) were retained. A sex offender was retained if he had a minor victim aged 14 and younger on the condition that (1) total number of adult victims was greater than total number of minor victims and/or (2) the offender was no more than 5 years older than the victim at the time of sexual offense. Information was obtained from the assessment reports complemented by official sources such as psychiatric reports and Offender Management System (OMS) database. Penile plethysmography (PPG) results were also obtained from the lab. Stimuli were a French translation (Earls & Proulx, 1986) of narratives used by Abel, Blanchard, Becker, and Djenderedjian (1978) and included mutually consenting sexual interactions, rape, and violent physical, non-sexual assaults. Rape involving humiliation (Proulx, Aubut, McKibben, & Côté, 1994) and neutral stimuli were also included for a total of five categories of stimuli, with two to three stimuli per category. It must be noted that subsequent analyses focused on three categories of stimuli that were relevant to this study and were common to all participants: mutually consenting sexual interactions, rape, and neutral stimuli.

Two studies were conducted using two samples of sex offenders consisting of 47 ($N = 47$) and 52 ($N = 52$) participants. Only sex offenders with a valid profile (i.e., at least a 2.50 mm amplitude penile response to a sexual stimuli category and at least one sexual category with a score greater than the one obtained on the *neutral* category) were retained. A Rape Index (RI) score was computed for each participant using the ratio method (mean response to rape stimuli divided by mean response to mutually consenting stimuli). A conservative RI cut-off score of 1.00 was chosen, where scores ≥1.00 indicate an equal or a greater responding to non-consenting stimuli; hence, a deviant profile. Conversely, scores <1.00 indicate a greater responding to mutually consenting stimuli; hence, a non-deviant profile. Based on RI cut-point of 1.00, the entire sample was divided into two groups: *non-deviant group* ($n = 29$ and $n = 34$ in studies 1 and 2, respectively) and *deviant group* ($n = 18$). Consequently, based on the two sets of DSM-5's proposed criteria for PCD (Tables 1 and 2), two and three diagnostic groups of sex offenders were formed using 2012 and 2010 sets of diagnostic criteria, respectively (see Table 3).

Table 3

Diagnostic Groups Based on 2010 and 2012 PCD Criteria Proposed for Inclusion in the DSM-5

Diagnostic group	%	N
Based on the 2010 criteria of the DSM-5		
Non-deviant RI profile and any number of victims (non-deviant)	61.70	29
Deviant RI profile and 1-2 victims (deviant non-PCD (<3))	23.41	11
Deviant RI profile and 3 victims or more (deviant PCD (≥3))[a]	14.89	7
Based on the 2012 criteria of the DSM-5		
Non-deviant RI profile and any number of victims (non-deviant)	61.70	29
Deviant RI profile and any number of victims (deviant PCD (≥1))[a]	38.30	18

Note. $N = 47$. PCD = Paraphilic Coercive Disorder. Presence of deviant sexual interests (Criterion A) was established via ratio index of deviance, or Rape Index (RI), using 1.00 as a cut-point. Sores <1.00 reflect a non-deviant profile and scores ≥1.00 reflect a deviant profile.

[a]*Deviant PCD (≥3)* and *deviant PCD (≥1)* groups qualify as having a diagnosis of PCD.

Results

First study

Observed frequencies. In the current sample, the observed frequencies of PCD (deviant PCD (≥3) and deviant PCD (≥1)) varied from 14.89% to 38.30%, depending on the set of diagnostic criteria that were used (minimum three victims versus any number of victims, respectively) (Table 3).

Present results suggest that prevalence rates for PCD among incarcerated sex offenders might be higher than what is usually alluded to in the literature (e.g., Frances, 2011). However, they also illustrate the drastic impact that a single defining criterion – number of victims – can have on prevalence rates. In our sample, 23.40% (n = 11) more sex offenders were diagnosed with PCD using 2012 as opposed to 2010 criteria. The implications are not negligible (e.g., social and legal sanctions), especially if there is no empirical basis to support the threshold for number of victims.

Victim count hypothesis. To test the victim count hypothesis, chi-square analyses were used. The results showed that there were no significant associations between the number of victims (1-2 vs. ≥3) and group membership (non-deviant and deviant PCD (≥1) groups), $\chi^2(1, N = 47) = .735$, $p = .391$, phi = -.125. Furthermore, a Receiver Operating Characteristics (ROC) curve did not show that the number of victims permitted discrimination among groups of sex offenders (area under the curve, AUC = .57, $p = .450$). Finally, the relationship between total number of victims and the RI was evaluated using Spearman's rho. There was no significant relationship between the two variables, $\rho = -.06$, $N = 47$, $p = .668$.

Although for more conclusive results further research with larger samples is necessary, these findings suggest that, overall, the victim count criterion is arbitrary. When the criterion for number of victims is set at 3, the rate of PCD was 14.89% but it more than doubled (38.30%) when the number of victims was set at 1. Using victim count as evidence of PCD can thus be misleading. This can be partly explained by the fact that individuals can commit multiple rapes for motives that are other than sexual (Knight, 1999) and that, conversely, coercive sexual fantasies and urges can be experienced without individuals ever acting on

them. Higher PCD rates in our sample can be due to the fact that participants retained for treatment at CÉRUM are a high risk population and may not be representative of rapists in general. Overall, based on present results, it can be observed that using a one victim criterion can substantially increase the number of false positives whereas a three victims criterion, combined with the presence of deviant sexual interests, can help limit the number of false positives, even though it may also lead to the problem of false negatives. Because most individuals involved in legal proceedings are quite understandably unwilling to openly discuss the motives underlying sexual offending, deviant sexual fantasies, and urges, it is necessary to find objective markers associated with rape-proneness that can help accurately diagnose individuals with PCD.

Second study

Some authors have proposed behavioral markers associated with PCD. For instance, Doren (2002) described a 9-item checklist which includes the presence of clear signs of sexual arousal (such as ejaculation) during events that are clearly non-consenting and raping while having cooperative sexual partners. One of the aims of our study was to examine the extent and the types of sexual behaviors used during sexual offenses in order to complement the extant scientific evidence on the matter.

Sexual acts. In order to do so, for every participant, each new sexual behavior he resorted to (fondling, indecent request, fellatio, intercourse, sodomy, digital penetration, exhibitionism, masturbation of or by the victim, forcing oral sex on the victim, attempted intercourse, attempted sodomy, and attempted digital penetration) across all his sexual offenses were indexed. Each sexual act was attributed a score on a 5-point scale ranging from 1 to 3 based on its level of intrusiveness. Scores were then added for each participant to obtain a total score representing the variable *sexual intrusiveness*. For the whole sample, the scores for sexual intrusiveness ranged from 1.00 to 11.50 (M = 4.74, SD = 2.26). For the analyses that follow, only the significant results will be reported.

One-way ANOVA showed a significant difference between three groups of sex offenders, $F(2, 49) = 4.91$, $p = .011$. Scheffé post-hoc results showed that the level of sexual intrusiveness used by sex offenders in the deviant PCD (≥3) group was significantly greater

(*M* = 7.00, *SD* = 2.55) than in the deviant non-PCD (<3) group (*M* = 4.00, *SD* = 2.01) as well as in the non-deviant group (*M* = 4.46, *SD* = 2.08). There was no significant difference between non-deviant and deviant non-PCD (<3) groups. There was a large effect size (R^2 = .17) between the group means (Cohen, 1988).

In order to see whether certain types of sexual behaviors were unique to specific groups of sex offenders, chi-square tests were used. For the two groups (2012 criteria), the results showed a moderate effect size and significant association between the membership to the group and two types of sexual behavior out of 12: *fondling*, $\chi^2(1, N = 52) = 4.29$, $p = .038$, phi = .29 and *exhibitionism*, $p = .015$, phi = .37 (Fisher's exact test). Significantly more sex offenders in the deviant PCD (≥1) group resorted to fondling (55.56%) and exhibitionism (27.77%) as opposed to sex offenders in the non-deviant group (26.47% and 2.94%, respectively). Similarly, significant results and large effect sizes were observed when looking at three groups (2010 criteria) for fondling, $\chi^2(2, N = 52) = 14.05$, $p = .001$, Cramer's $V = .52$ and exhibitionism, $\chi^2(2, N = 52) = 16.79$, $p < .001$, Cramer's $V = .57$. More precisely, significantly more sex offenders in the deviant PCD (≥3) group engaged in fondling (100%) and exhibitionism (57.14%) than did participants from the non-deviant group (26.47% and 2.94%, respectively). Despite the overall significant association of group membership with fondling and exhibitionism, the association between these variables and deviant non-PCD (<3) group was not statistically significant (27.27% and 9.09%, respectively). Overall, the observed results are somewhat counterintuitive. One explanation is that preferential rapists are not exclusively motivated by coercive sex (penetration) and can resort to a number of diverse paraphilic behaviors.

Classification of sex offenders based on sexual acts. In order to see whether sex offenders can be classified on the basis of sexual behaviors, a two-step cluster analysis was conducted, which revealed two clusters. Cluster 1 (*n* = 35) consisted of *completed intercourse* and *completed sodomy* whereas cluster 2 (*n* = 17) was composed of *indecent request, exhibitionism, fondling, masturbation, attempted intercourse*, and *digital penetration*. Consequently, chi-square analyses showed a moderate effect size and significant association between two groups (non-deviant and deviant PCD (≥1)) and two clusters, $\chi^2(1, N = 52) = 3.75$, $p = .053$, phi = .27. In the non-deviant group, significantly more sex offenders resorted to

intercourse and sodomy (76.47%) than to indecent request, exhibitionism, fondling, masturbation, attempted intercourse, and digital penetration (23.52%). Additionally, significantly more sex offenders in the non-deviant group (76.47%) than in the deviant PCD (≥1) group (50.00%) resorted to intercourse and sodomy. Conversely, significantly more participants in the deviant PCD (≥1) group (50.00%) than in the non-deviant group (23.52%) resorted to indecent request, exhibitionism, fondling, masturbation, attempted intercourse, and digital penetration. Similarly, chi-square analyses showed a moderate effect size and significant association between three groups and the two clusters, $\chi^2(2, N = 52) = 6.14$, $p = .046$, Cramer's $V = .34$. Precisely, significantly more participants in the deviant PCD (≥3) group resorted to indecent request, exhibitionism, fondling, masturbation, attempted intercourse, and digital penetration (71.43%) than to intercourse and sodomy (28.57%). Inversely, in the non-deviant group, significantly more participants resorted to intercourse and sodomy (76.47%) than to indecent request, exhibitionism, fondling, masturbation, attempted intercourse, and digital penetration (23.53%). Non-deviant and deviant PCD (≥3) groups also significantly differed from each other in their recourse to cluster 1 and cluster 2 sexual acts.

Our findings suggest that preferential sex offenders tend to be more sexually intrusive than other groups. However, they seem to resort to sexual acts that can be, when taken individually, described as qualitatively less intrusive (e.g., fondling as opposed to sodomy). These findings are rather surprising given that we are looking at sex offenders who are "preferential rapists" and who, by definition, should resort to more intrusive sexual behaviors such as intercourse. As mentioned previously, one possible explanation is that preferential rapists may not be exclusively motivated by coercive sex per se and can resort to a number of paraphilic behaviors that are coercive in nature.

Conclusion

We are in agreement with the decision of the American Psychiatric Association to exclude PCD from DSM-5 because, in their current state, the proposed criteria lack precision. This has a direct impact on the diagnostic validity and inter-rater reliability and raises the issue of false positives with all their associated consequences, legal or otherwise. The present results suggest that combining behavioral markers (number of victims, types of sexual behaviors) with

phallometric assessment results can help formulate conservative diagnostic criteria for PCD that limit false positives. Also, findings provide a framework for future studies – using larger samples and control groups to permit a better generalization of the results – that look into different combinations of these variables. It is our hope that the repeated exclusion of PCD from DSM, including from Section III of the manual, will not hinder the research in this challenging area.

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CHAPTER III – SECOND ARTICLE

Paraphilic Coercive Disorder: Assessing Observed Frequencies, Sexual Recidivism Data, and Validity of Diagnostic Criteria in a Sample of Rapists

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Abstract

Paraphilic Coercive Disorder (PCD) has a long and controversial history. Most recently, attempts were made to include PCD in the DSM-5. To this end, two sets of PCD criteria were proposed, one in 2010 and one in 2012. In the present study, which consisted of a sample of 47 rapists (N = 47), two sets of groups, having three and two subgroups each, were formed based on 2010 and 2012 criteria, respectively. We assessed the validity of relying on the minimum number of victims (1 vs. 3) as a defining criterion for PCD, we examined the observed frequencies of PCD and rates of sexual recidivism, as well as which of the variables of interest – actuarial risk assessment tools (Static-99, Stable-2007 and combined measures), number of victims and Rape Index – could help predict sexual recidivism. Observed frequencies of PCD varied from 14.89% to 38.30%. Victim count was not a valid criterion for diagnostic purposes. In our sample, five sex offenders (10.64%) sexually recidivated with an average nine years of follow-up. Among the variables investigated, only the Rape Index helped predict sexual recidivism. Implications for future research and DSM criteria for PCD are discussed.

Keywords: rapists, Paraphilic Coercive Disorder, victim count hypothesis, predictors of sexual recidivism, Rape Index

Introduction

Rape is a heinous crime which has a range of short and long term psychological, emotional and physical sequelae on victims including, but not limited to, post-traumatic stress disorder and depression (Hanson, 1990; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992), problems in sexual functioning (e.g., fear of sex, arousal dysfunction and desire dysfunction; Becker, Abel, & Skinner, 1979), alcohol and drug related problems (Kilpatrick, Edmunds, & Seymour, 1992) and long-term medical complications (e.g., gastrointestinal complaints, headaches, chronic pelvic pain; Koss & Heslet, 1992). Many researchers and clinicians (e.g., Abel, Becker, Cunningham-Rathner, Mittelman & Rouleau, 1988; Abel & Rouleau, 1990; Freund, Scher, Racansky, Campbell, & Heasman, 1986; Money, 1984) have proposed that a portion of rapes are committed by men afflicted by a paraphilic disorder.

For the mental health professionals across the globe, especially in the western society, the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) serves as a guide to determine what does, and does not, constitute a mental disorder. One of its diagnostic categories, *paraphilia*, was adopted as a classification of sexual deviation in the DSM-III (American Psychiatric Association, 1980). Based on DSM-IV-TR (American Psychiatric Association, 2000), paraphilias refer to mental disorders in which recurrent, intense sexually arousing fantasies, urges, or behaviors involving primarily non-human objects, children or other non-consenting persons, or the suffering or humiliation of oneself or others last for at least 6 months (Criterion A). The person has either acted on these urges and/or they cause "clinically significant distress or impairment in social, occupational, or other important areas of functioning" (Criterion B). The DSM-IV-TR includes eight specific paraphilias, namely fetishism, exhibitionism, frotteurism, voyeurism, pedophilia, transvestic fetishism, sexual sadism and sexual masochism. Many other paraphilias that are "less frequently encountered" (p. 567), such as necrophilia, are placed in a residual category, paraphilia not otherwise specified (paraphilia NOS).

Between 1983 and 1986, the first attempts were made to add Paraphilic Coercive Disorder (PCD) diagnosis to the DSM-III-R under the name "paraphilic rapism". It was meant to reflect a paraphilic interest in rape (coercion) that was distinct from sexual sadism (suffering and/or

humiliation). The proposal was ultimately rejected in 1986 based on strong opposition and the concerns raised as to its validity and reliability (Kutchins & Kirk, 1997; Prentky, Janus, Barbaree, Schwartz, & Kafka, 2006), and concerns regarding the lack of information about its prevalence (Spitzer, 1986). However, some argue that PCD was rejected more for political and ideological concerns and possible legal ramifications than for any available disconfirming empirical evidence about the validity of identifying such a hypothesized subset of rapists (Abel, Becker, Cunningham-Rathner, Mittelman & Rouleau, 1988; Abel & Rouleau, 1990; Doren, 2002; Freund, Scher, Racansky, Campbell, & Heasman, 1986; Freund, Seeley, Marshall, & Glinfort, 1972; Fuller, Fuller, & Blashfield, 1990; Money, 1984, 1999; Stern, 2010).

The most recent attempts to include PCD in DSM-5 revived the longstanding debate surrounding the validity of PCD. During the initial revision process of the manual, the Task Force in charge of revising paraphilic disorders proposed the following set of PCD criteria to be included in DSM-5 (American Psychiatric Association, 2010):

A. Over a period of at least six months, recurrent, and intense sexual arousal from sexual coercion, as manifested by fantasies, urges, or behaviors.
B. The person has clinically significant distress or impairment in important areas of functioning, or has sought sexual stimulation from forcing sex on three or more nonconsenting persons on separate occasions, and
C. The diagnosis of PCD is not made if the patient meets criteria for a diagnosis of Sexual Sadism Disorder (SSD).

The Task Force proposed that, in order to diagnose the paraphilic disorder in uncooperative patients, the threshold for minimum number of separate victims should be set at three. This was done in an attempt to balance specificity and sensitivity, and thus improve the ability to discriminate sex offenders with and without PCD. However, this particular cut-point did not derive from any theory or practice (American Psychiatric Association, 2011), nor was it supported by any empirical research (First, 2010; Wakefield, 2011; Wollert, 2011). In 2012, PCD was rejected from the main body of DSM-5. It was, however, still considered for inclusion in Section III of the manual reserved for diagnostic categories that require further

study. By then, PCD criteria had been revised and read as follows (American Psychiatric Association, 2012):

A. Over a period of at least 6 months, an equal or greater arousal from sexual coercion than from consensual interaction, as manifested by fantasies, urges, or behaviors.
B. The person has acted on these sexual urges with a nonconsenting individual, or the sexual urges or fantasies cause marked distress or impairement in social, occupational, or other important areas of functioning.
C. The diagnosis of PCD is not made if the patient meets criteria for a diagnosis of SSD.
D. The individual is at least 18 years of age.

It is to be noted that the number of victims in the Criterion B was reduced to one.

On May 18, 2013, 13 years after the publication of DSM-IV-TR, the DSM-5 was finally released (American Psychiatric Association, 2013). However, PCD was, for the fourth time since DSM-III-R (American Psychiatric Association, 1987), excluded from the main body of the manual as well as from Section III, reserved for conditions requiring further study. Arguably, one of the most notable changes made in the DSM-5's section on paraphilias is a terminological shift whereby paraphilias are distinguished from paraphilic *disorders* to indicate that although a paraphilia (non-disordered sexual variation) is a necessary condition for having a paraphilic disorder, it is insufficient, thus making it possible for an individual to engage in consensual non-normative sexual behavior without being inappropriately labeled with a mental disorder. Furthermore, paraphilia NOS category has been replaced by *other specified disorder* category. The repeated rejection of PCD from DSM is part of its long and controversial history and contributes to maintaining the unanswered questions regarding the nature of PCD (e.g., categorical vs. dimensional structure of PCD, Knight, 2010; Knight, Sims-Knight, & Guay, 2013; excitatory vs. inhibitory processes at play during sexual arousal in response to sexually coercive stimuli, Barbaree, 1990; Lalumière & Quinsey, 1994; lack of clear defining criteria and data on prevalence rates). For instance, to the exception of vague estimates of prevalence rates of PCD cited by various sources (e.g., uncommon, American Psychiatric Association, 1985, 2013; "vanishingly rare "black swan" rapist", Frances, 2011), data on prevalence rates of this diagnosis among sex offender population are unavailable.

In spite of PCD's rejection from the diagnostic manual, the debate over the legitimacy/validity of PCD as a paraphilic disorder continues. Despite estimates suggesting that PCD is relatively rare among rapists (e.g., American Psychiatric Association, 1985; Frances, 2011), and its repeated exclusion from the DSM, the diagnosis is still commonly employed in clinical settings and legal proceedings alike under paraphilia NOS which can have non-negligible consequences (e.g., indefinite civil commitment of convicted sex offenders after completing their mandatory prison sentences under sexually violent predator (SVP) laws in the United States). In fact, at 42.6%, the second most prevalent diagnosis among men subject to SVP laws, after pedophilia, is paraphilia NOS with a *non-consent* or *rape* descriptor (Jackson & Richards, 2007). Therefore, the exclusion of PCD from the DSM based on legal concerns does not seem to be justified as PCD could still be used under paraphilia NOS or, given DSM-5's revised nomenclature, under other specified disorder. Furthermore, legal concerns should not guide what does and does not constitute a mental disorder in the DSM as the purpose of DSM is to provide a common language for clinicians and researchers to establish consistent and reliable diagnoses, identify prevalence rates in order to plan mental health services, and to promote research into mental disorders and into the development of appropriate interventions. It is therefore imperative to investigate the proposed criteria of PCD in order to examine their validity and to promote the diagnostic accuracy of PCD. Furthermore, given the deleterious impact that rape has on victims, one of the main concerns of mental health professionals working with sex offender population is to identify motives and variables associated with sexual recidivism (such as deviant sexual interests, general self-regulation problems; Hanson & Morton-Bourgon, 2005), assess the risk of sexual recidivism (usually using actuarial risk assessment tools, such as Static-99), and implement intervention strategies that will reduce these risk-relevant factors and consequently, decrease likelihood of sexual reoffending and further victimization. The overall base rates of sexual recidivism have been reported at 14.1% after a 5-year follow-up by Harris and Hanson (2004) and 13.4% with an average follow-up period between 4-5 years (Hanson & Bussière, 1998).

The purpose of the present study was to contribute to the small, growing body of empirical literature pertaining to PCD. To that end, we examined the observed frequencies of PCD using

the proposed DSM-5 criteria within a population of sex offenders who offended against adult women. Next, we investigated the validity and impact of relying on the number of victims as a diagnostic criterion of PCD (preliminary results can be found in Agalaryan & Rouleau, 2014). In the present paper, we further examined rates of sexual recidivism and studied which of the diagnostic subgroups based on DSM-5's PCD criteria sexually reoffended. Finally, we investigated actuarial risk assessment tools (Static-99, Stable-2007 and combined measures), number of victims and Rape Index to determine which ones help predict sexual recidivism. We begin with a brief description of methods used for the assessment of sex offenders. We then provide an overview of the literature on the evidence for PCD among sex offenders followed by a discussion of problems associated with the structure of DSM-5's proposed PCD criteria. We conclude with practical implications of our findings.

Assessment of Sex Offenders

The assessment of sexual offenders is a complex process. It requires a full psychological evaluation, an examination of criminal history and police reports and, whenever possible, the corroboration of any information obtained from the offender by collateral sources (Coric et al., 2005). In addition to taking into account the number and the nature of the crimes, the presence of deviant sexual interests is also commonly evaluated based on the assumption that specific types of deviant sexual preferences drive certain types of sexual offending (*sexual preference hypothesis* of sexual offending; Barbaree & Marshall, 1991; Lalumière & Quinsey, 1994). Deviant sexual interests are assessed by self-report measures (questionnaires, card-sort procedures, interview) (Coric et al., 2005) and by instruments that rely less on the individual's will to self-disclose, such as penile plethysmography (PPG) (Barker & Howell, 1992; Coric et al., 2005; Lalumière, Quinsey, Harris, Rice, & Trautrimas, 2003; Thornton, 2010). Currently, PPG remains the gold standard for assessing sexual interests in men.

The rationale behind the use of PPG is that penile tumescence to deviant material, such as audio or visual stimuli, is indicative of underlying paraphilic sexual interests (Rempel & Serafini, 1995) which, in turn, are thought to either determine or play an essential role in the complex set of factors that determine deviant sexual activities (Marshall & Fernandez, 2003). Based on research findings that indicate a relationship between men's sexual arousal to

depictions of sexually coercive material as measured by PPG and their propensity to rape (Malamuth, 1981; Seto & Kuban, 1996), a greater sexual arousal to coercive versus consenting material in rapists contrarily to other men is expected (Lalumière et al., 2003). In fact, this relative arousal to rape stimuli, referred to as the Rape Index (RI), is the variable that most consistently and maximally distinguishes rapists from other groups of men (Lalumière & Harris, 1998; Lalumière & Rice, 2007). Therefore, the RI has often been studied as the variable of interest when examining PCD.

Is There Evidence for PCD Among Sex Offenders?

Two sets of data have been commonly examined in relation to PCD: RI data and information gathered via clinical interviews. On one hand, individual studies using RI data and comparing convicted rapists to non-sexual offenders have shown mixed results. For instance, while Eccles, Marshall and Barbaree (1994) found no difference for rape stimuli between groups of rapists and community men, Seto and Barbaree (1993) found that normal participants had greater rape indices than did rapists. Some of the older studies, conducted at the time of the debate regarding the inclusion of PCD in the DSM-III-R, suggested the existence of a subset of rapists with higher rape indices than that of control groups (Abel et al., 1977; Barbaree, Marshall, & Lanthier, 1979; Earls & Proulx, 1986; Quinsey & Chaplin, 1984; Quinsey, Chaplin, & Varney, 1981). In a more recent study, Lalumière and colleagues (2003) compared rape indices between rapists, non-sexual violent offenders, and community men. The results, which were based on average sexual response to the stimuli, showed that rapists responded similarly to both rape and consenting scenarios, with a slight preference for rape. On the other hand, both of the two comparison groups showed a clear preference for, and a greater arousal to consenting scenarios than to any other categories of stimuli (rape, non-sexual violence, neutral). In terms of the RI data, the study showed that the two control categories produced nearly identical and negative rape indices as opposed to rapists, who produced much higher and positive rape indices. A large effect size was observed between rapists and community men (d = 1.36), as well as between rapists and assaulters (d = 1.50). In yet another recent study, rapists had higher rape indices than did community men (Harris, Lalumière, Seto, Rice & Chaplin, 2012).

To make sense of the mixed results based on RI data as a dependent variable, two meta-analyses were conducted. The meta-analyses revealed a substantial difference between convicted rapists and non-sexual offenders (other types of offenders or men recruited from the community) (Lalumère & Quinsey, 1994), as well as between officially detected or self-identified rapists and community men or other types of sex offenders (Hall, Shondrick, & Hirschman, 1993). These meta-analyses showed that rapists have a higher RI than do comparison groups and that they differ significantly from non-rapists in their responses to sexually coercive stimuli as opposed to consensual stimuli, at least in the laboratory settings. As for the difference between the groups, as measured by Cohen's effect size *d*, they were found to be of 0.82 and 0.71, respectively. Based on proposed norms, these magnitudes are considered to be medium to large (Cohen, 1992).

Overall, when the results from various studies using RI data are taken into consideration, it can be concluded that the average profile for convicted rapists is a roughly equal responsiveness to rape and consensual themes (Lalumière et al., 2003; Thornton, 2010; Willmot & Hart, 1996). On the other hand, the average profile for non-sex offenders has been a clearly greater arousal to consenting than to coercive stimuli (Abel et al., 1977; Barbaree, Marshall & Lanthier, 1979; Lalumière et al., 2003; Quinsey & Chaplin, 1984). Despite the fact that the results based on the RI data point to the existence of a subgroup of sex offenders with PCD (interest in, or indifference to coercive vs. consensual sex), the disagreement about this putative condition seems to stem from the interpretation of the results. Precisely, it is yet to be determined whether the pattern of sexual arousal to audiotaped scenarios of coercive and non-coercive sex among sex offenders, such as higher rape indices, is due to the arousal by the coercive sexuality (therefore indicative of paraphilic interests) or due to the failure to be inhibited from such coercive cues. Of course, the same argument may apply to SSD. Whilst investigation into this matter is important in order to further elucidate the issues surrounding PCD, relevance of RI should not be discarded as currently it is the variable that seems to most consistently and maximally distinguish rapists, as a group, from other groups of men (Lalumière & Harris, 1998; Lalumière & Rice, 2007).

Parallel to the RI data, research in clinical settings has also suggested the existence of a subgroup of men with a purported PCD. For instance, Freund and colleagues (1972) have

documented the existence of a small group of men with a "deviant rape pattern" (p. 357), a pattern later explained as a type of courtship disorder (i.e., distortion of normal courtship behavior), less severe than and distinct from true sadism (Freund et al, 1986). It applied to a subset of rapists, called *preferential types*, where deviant sexual arousal was hypothesized to play a motivational role for sexual offending and consequently, led to a preference for rape over intimate sexual interactions (Freund et al., 1972). In 1984, Money classified about thirty paraphilias into six categories, amongst which was predatory paraphilia that included rape. He later (1999) used the term "biastophilic rapism" or "raptophilia" to designate a specific category of rapists with a paraphilic interest in rape. Similarly, Abel and colleagues (1988) identified 21 paraphilias, one of which was labeled "rape".

Furthermore, various typological systems have been proposed to explain and promote a better understanding of sexual offending behavior. Knight, Rosenberg and Schneider (1985), for instance, have identified a subset of rapists whose motivation is hypothesized to be primarily sexual in nature. The Massachusetts Treatment Center: Rapist Typology (MTC; Knight & Prentky, 1990) is currently the most empirically based typology (Bartol & Bartol, 2008, p. 308). In its third, revised version (MTC: R3; Knight, 1999), the author has identified four major types of rapists based on their primary motivation for sexual aggression, which includes opportunity, pervasive anger, vindictiveness, and sexual gratification. The sexual gratification type is further subdivided into sadistic and non-sadistic categories, whose motivation to sexually offend is hypothesized to be sexual (i.e., marked by a presence of long lasting sexual or sadistic fantasies and enduring sexual preoccupation). Rapists with PCD could potentially fall into the non-sadistic category. In this line of thought, based on clinical interviews with rapists, Abel and Rouleau (1990) have noted that a large number of individuals frequently report recurrent, repetitive, and compulsive urges and fantasies to commit rapes and as such, along with other relevant characteristics (distress, impairment in functioning), they would meet the required criteria for paraphilias as described in the DSM-IV and, by extension, for paraphilic disorders in the DSM-5. With support from such clinical data, gathered under a Certificate of Confidentiality, Abel and Rouleau have argued that DSM should include a paraphilic disorder for non-sadistic rapists. In sum, the available data suggests that PCD could be a valid disorder. However, the extant tools make it difficult to

adequately assess its presence within a heterogeneous pool of sex offenders, including the problems related to the DSM criteria, as will be discussed herein.

DSM-5 PCD Criteria and Associated Problems

Among the DSM-5's proposed criteria for PCD, the Criterion B is of particular interest to us, where different thresholds for number of victims have been proposed over time. Possibly the greatest appeal of using number of victims to diagnose PCD is that it is an objective and a straightforward variable without any ambiguities associated with it, provided that the actual number of victims is known. However, there are a number of potential problems associated with Criterion B, one of which is that it will be tempting to diagnose PCD solely on the basis of the presence of a victim. In other words, as soon as a man commits one or several rapes, Criterion B is met. In the absence of any compelling evidence supporting the presence of deviant sexual interests, it is possible to argue that if one commits rape – especially multiple rapes – then he must be driven by underlying fantasies of coercion or must be turned on by the coercive aspect of the sexual act. Such inferences (i.e., inferring coercive sexually arousing motives from and equating them with coercive behaviors and concluding on the existence of a mental disorder based on behavior alone) are frequently made in sexual predator civil commitment proceedings. The validity problem with relying on the number of victims lies in the fact that the motives for rape can be numerous (e.g., anger, opportunity; Knight, 1999; Prentky & Knight, 1991) which, like paraphilic motives, can give rise to "pseudo-paraphilic", repetitive behavior, "especially when certain environmental contextual considerations remain constant" (Wakefield, 2011, p. 204). For instance, given opportunities, a "normal" male may have multiple victims, another male with a paraphilic disorder may victimize the same individual on multiple occasions while yet another individual may never act on his paraphilic fantasies or urges. As such, despite an irrefutable appeal of relying on number of victims as a criterion for PCD, a mere presence of multiple behaviors does not seem to be a valid indication of paraphilic disorder diagnosis (e.g., First, 2010; First & Halon, 2008; Wakefield, 2011). The diagnostic question is what the motivation for the act is, regardless of the frequency of its occurrence.

In addition to the potential problems associated with reliance on the number of victims, the current format of the proposed diagnostic criteria for PCD seems to disregard the premise whereby sexually arousing fantasies and urges are among the "essential features" of paraphilias (DSM-IV; American Psychiatric Association, 2000, p. 566), which brings us to the Criterion A. The Criterion A of PCD, which targets the presence of sexual fantasies and urges focused on sexual coercion, has an added specifier: "or behaviors". The intention is that behaviors, like urges and fantasies, will serve as evidence of a deviant arousal pattern. In forensic settings, where one rarely, if ever, freely reports underlying motives for rape, objective markers, such as types of behaviors, can be valuable sources of evidence for a deviant sexual arousal pattern. However, in its current form, in the absence of direct evidence of deviant sexual fantasies and urges, a mere presence of a victim could serve as evidence for both, Criterion B (number of victims) and Criterion A (behavior), and would allow for the diagnosis of PCD to be made. In other words, the current wording of Criterion A would render the presence of deviant sexual interests and urges – essential features of paraphilic disorders – obsolete when, in fact, they should exist independently of specific observable actions. Overall, the proposed criteria for PCD and their current interpretation seem to blur the lines between crime and disorder and could lead to a large numbers of misdiagnoses (First, 2010; Wakefield, 2011). This calls for the need to investigate the proposed PCD criteria more closely and to revise them in accordance with empirically based data.

Objectives of the Present Study

One of the main purposes of the present study was to investigate what percentage of men convicted of sexually assaulting adult women met the PCD diagnosis using 2010 and 2012 PCD criteria proposed for inclusion in the DSM-5. To our knowledge, there are no published studies having directly examined the rates of PCD in a sample of sex offenders. The second objective was to assess whether number of victims is a valid criterion for PCD and could help predict group membership. Consistent with the literature suggesting heterogeneity in the motives for sexual offending (e.g., Knight, 1999; Prentky & Knight, 1991), we hypothesized that number of victims was not a valid criterion for PCD diagnosis and, as such, could not help discriminate between diagnostic groups. Similarly, we postulated that the association between RI and number of victims would not be significant. Third, we assessed the rates of sexual

recidivism in our sample and examined which of the diagnostic subgroups that were constituted based on the DSM-5's proposed criteria for PCD were likely to sexually reoffend. The fourth objective aimed to examine which of the variables of interest – number of victims, RI, and actuarial risk assessment data (see Method section) – helped predict sexual recidivism. We hypothesized that actuarial risk assessment tools (Static-99, Stable-2007, and combined measures of the two) and RI, but not total number of victims taken alone, would help predict sexual recidivism. Our reasoning was in line with the available data which suggests that Static-99 (Helmus & Hanson, 2007; Craissati & Beech, 2005), Stable-2007 and the combined measures (Hanson et al., 2007) have a moderate predictive accuracy for sexual recidivism and that deviant arousal is the strongest predictor of sexual recidivism (e.g., Hanson & Morton-Bourgon, 2004).

It must be noted that, in the current study, the presence of deviant sexual interests (Criterion A) was established using deviance index data (RI) while disregarding the "or behaviors" specifier in line with the critiques discussed previously. The Criterion B was determined by looking at the number of victims, where the requirement for a minimum number of victims varied depending on whether 2010 or 2012 set of PCD criteria was being considered. As for Criterion C, whereby SSD serves as an exclusion criterion for PCD diagnosis, it was not scrutinized. For the purposes of the present study, it was taken for granted that SSD and PCD represent two distinct constructs.

Method

Participants

Files of 89 (N = 89) sex offenders convicted for having sexually assaulted an adult woman of 15 years of age and older, and referred to *Centre d'Études et de Recherche de l'Université de Montréal* (CÉRUM) for a phallometric evaluation of their sexual interests between the years 2000-2012, inclusively, were reviewed. For the purposes of this study, a sex offender was retained if, among his victims, he had minor victims aged 14 and younger on the condition that (1) total number of adult victims was greater than total number of minor victims and/or (2) the offender was no more than five years older than the victim at the time of the sexual aggression. Moreover, to be included in the study, a sex offender had to have undergone a phallometric assessment. Fourteen participants (n = 14) were excluded from the study due to the presence

of sadistic behaviors (e.g., physical torture, including burning and cutting off body parts, insertion of objects into victim's orifices and reported sexual arousal from physical violence inflicted onto their victims) and four (n = 4) for not having undergone a phallometric evaluation for either technical problems, refusal to consent to the PPG evaluation, or because the PPG instrument was not adapted for the participants' genitals. Furthermore, of the six participants for whom the raw PPG results were unavailable despite having undergone the phallometric assessment, five (n = 5) were excluded from the study (see Preliminary Analyses section). Finally, 19 participants (n = 19) were excluded due to the invalid phallometric results (see Measures section). At the time of the study, all the sex offenders were released from the federal penitentiaries across Canada where they were serving time for two years or more.

The final sample consisted of 47 (N = 47) participants between the ages of 23 and 52 (M = 37.87, SD = 8.46). Sex offenders in the current sample had a total of 1 to 13 victims (M = 2.98, SD = 2.25). The length of sentence varied from two years to life in duration, reported in months (M = 78.09, SD = 64.69). The sample was predominantly Caucasian (82.98%). Most sex offenders were single (65.96%), heterosexual (95.74%) and had no biological child (55.32%) from either a current or previous relationship. Five participants (10.64%) were illiterate (Table 1). As can be seen in Table 2, over half of the sample (57.45%) had one sentence related to a sexual offense, whereas the remainder (42.55%) consisted of repeat sex offenders with either two or more sentences related to a sexual offense. Most (89.36%) were serving time for a sexual aggression at the time of the evaluation. While four participants (8.51%) had an accomplice at least on one occasion during sexual assault, the majority (91.49%) operated alone. Most sex offenders (46.81%) had all unknown victims and many (44.687%) denied one, some or all sexual offenses or aspects of sexual aggression they were found guilty of.

Procedure

In order to build the database, the assessment reports of all sex offenders were examined. Information relevant for the present study was extracted from the assessment reports and complemented by official sources such as psychiatric reports and the Offender Management

System (OMS) database. All sex offenders had given a written informed consent to the assessment process which was part of the program specialized in assessment and treatment of

Table 1

Sociodemographic and Psychological Characteristics of Sex Offenders

Characteristic	%	N
Ethnic Background		
Caucasian	82.98	39
Native American	10.64	5
Black	6.38	3
Marital Status		
Single	65.96	31
In a relationship	2.13	1
Common law	14.89	7
Married	6.38	3
Separated	6.38	3
Divorced	4.26	2
Offspring		
At least one child	42.55	20
No child	55.32	26
Missing	2.13	1
Sexual Orientation		
Heterosexual	95.74	45
Bisexual	4.26	2
Illiterate		
Yes	10.64	5
No	89.36	42

Note. $N = 47$.

Table 2

Criminological Characteristics of Sex Offenders

Characteristic	%	N
Number of incarcerations for a crime of sexual nature[a]		
One incarceration	57.45	27
Two incarcerations or more	42.55	20
Charges relating to current sentence		
Sexual assault	89.36	42
Sexual assault and murder	2.13	1
Attempted sexual assault	2.13	1
Incest	2.13	1
Sexual contact on a minor	2.13	1
Criminal harassment, death threats	2.13	1
Presence of accomplice during sexual assault		
Yes, at least on one occasion	8.50	14
No	91.49	43
Offender/victim relationship: stranger victim[b]		
At least one stranger victim	21.28	10
All stranger victims	46.81	22
Offender/victim relationship: unrelated victim[c]		
At least one unrelated victim	29.79	14
All related victims	2.13	1
Overall level of admission of sexual offense[d]		
Full admission	19.15	9
Minimization	36.17	17
Denial	44.68	21

Note. $N = 47$.

[a]Including the current incarceration.

[b,c]As per Static-99 coding rules.

[d]Level of admission of sexual offenses was determined during the initial assessment interview with sex offenders.

sex offenders (see Appendix A). By consenting to the assessment process, participants also gave authorisation that the various test results be used for research purposes, such as this one. After the assessment process, if it was deemed pertinent, a sex offender was to take part in a specialized treatment program, in which case a new consent form was signed.

Measures

Static-99. Static-99 (Hanson & Thornton, 2000) is the most widely used actuarial assessment instrument designed to predict sexual recidivism (Helmus & Hanson, 2007). It is intended for use with males who are 18 years of age or older, known to have committed at least one sexual act against a non-consenting adult or a child (Langton, Barbaree, Hanson, Harkins, & Peacock, 2007). Global score ranges from 0-12 with the following risk level categories: low (0-1), moderate-low (2-3), moderate-high (4-5) and high (6 and more) (see Appendix B). Static-99 has a moderate predictive accuracy for sexual recidivism (r = .33; area under the Receiver Operating Characteristics (ROC) curve, AUC = .71) (Helmus & Hanson, 2007; Craissati & Beech, 2005) and it remains constant across various contexts and samples in which it was tested (e.g., rapists, child molesters; Harris, Phoenix, Hanson & Thornton, 2003; Helmus & Hanson, 2007; Craissati & Beech, 2005). It has a good inter-rater reliability that ranges from .88 to .96 (r = .88; Langton et al., 2007; r = .96; Harris et al., 2003). Internal consistency for Static-99 is not an appropriate measure given that the items that constitute it were not expected to "hang together" (Anderson & Hanson, 2010). Rather, Static-99 items were chosen specifically because of their stand-alone association with the outcome variable of interest (sexual recidivism).

Stable-2007. Stable-2007 helps establish the base rate of a sex offender's functioning for the past and the following years. It aims to assess and track changes in risk level across time by taking into consideration sex offenders' characteristics related to recidivism that are bound to vary over time, months or years, such as negative emotionality (Hanson, Harris, Scott, & Helmus, 2007). Stable-2007 consists of five relatively stable domains which include 13 items, such as deviant sexual interests (see Appendix C). The total score is associated with the following risk levels: low (0-3), medium (4-11) and high (12-26). Internal consistency for Stable-2007 is .80 (α = .80). Stable-2007 has a moderate predictive accuracy for sexual re-

offence (AUC = .68), slightly superior to its predecessor, Stable-2000 (AUC = .65) (Hanson et al., 2007). Stable-2007 has a good inter-rater reliability (intraclass correlation coefficient, ICC = .90), similar to its predecessor, Stable-2000 (ICC = .89) (Eher, Matthes, Schilling, Haubner-MacLean, & Rettenberger, 2012).

Combined measures. Combining Static-99 and Stable-2007 results into a global score of recidivism risk following specific guidelines increases the predictive power for recidivism beyond the one based on static or dynamic variables taken individually (e.g., AUC = .76 to AUC = .84 for sexual recidivism) (Hanson et al., 2007).

Stimuli. Audio stimuli consisted of narratives used by Abel, Blanchard, Becker, and Djenderedjian (1978) which were later translated and validated within a French-speaking sex offender population by Earls and Proulx (1986). The stimuli included mutually consenting sexual interactions, rape, and non-sexual physically violent assaults. Rape involving humiliation (Proulx, Aubut, McKibben, & Côté, 1994) and neutral stimuli were also included for a total of five categories, with two to three stimuli per each category. It must be noted that the two sets of stimuli, non-sexual physically violent assault and rape involving humiliation, had not been systematically administered to all participants. For this reason, the subsequent analyses focused on three categories of stimuli that were relevant and were common to all participants: mutually consenting sexual interactions, rape, and neutral stimuli.

Phallometric assessment and RI. Phallometric assessment results were retrieved from the laboratory at CÉRUM. During the initial assessment process, the audio stimuli were presented in an alternate fashion so that two stimuli from the same category never followed one another. It has been shown that the use of more than one stimulus per category during plethysmographic assessment increases validity and reliability of the results thus obtained (Harris, Rice, Quinsey & Chaplin, 1996; Lalumière & Quinsey, 1994) and that the repetition of stimuli is essential for discriminant validity of the PPG results (Frenzel & Lang, 1989). In order to ensure that participants were not using cognitive strategies (distraction) to suppress their sexual arousal during phallometric assessment, they were asked to provide a description of the material which they were exposed to at the start of the procedure.

The raw PPG data were obtained by subtracting the baseline level observed at the beginning of a testing session from the peak response occurring during stimulus presentation. Consequently, mean scores were computed for each of the three categories of stimuli. In line with Marshall and Fernandez's (2003) recommendation to indicate both, the decision criteria and how many participants were excluded, in the present study, phallometric responses were considered to be valid when the average response to any given category attained at least 2.50 mm *and* at least one of these categories had a score higher than the average response on the *neutral* category. Based on these criteria, 19 (28.79%) non-/low-responders out of 66 sex offenders that were retained for the study were excluded.

Subsequently, RI scores were computed for all participants (see section on Data Analytic Strategy). The RI was originally developed by Abel, Barlow, Blanchard, and Guild (1977). It is calculated as the ratio of the penile responses on PPG to rape and mutually consenting sexual stimuli or, more recently, by subtracting z-scores representing the two categories to capture relative preference for deviant stimuli. Looking at the relative arousal rather than at arousal to a single category of stimuli allows for meaningful comparisons between participants and enhances the discriminant validity between different groups (Harris, Rice, Quinsey, Chaplin, & Earls, 1992). In practice, a cut-off score of 0.00 is used for differential index where scores above cut-point (positive RI) reflect a stronger penile response to rape than to consensual stimuli and scores below the cut-point (negative RI) reflect a stronger arousal to depictions of consensual stimuli than to rape (Thornton, 2010). As for the ratio method, different cut-points have been employed in the literature to determine whether a given PPG profile is deviant or non-deviant. A cut-off score of 1.00 is considered to be conservative in that it leads to very few false positive errors (i.e., few actually non-deviant participants are misclassified as deviant) while allowing the identification of a substantial number of rapists as sexually deviant (Lalumière & Quinsey, 1993). For the ratio method, scores equal to or above 1.00 indicate a non-discrimination between consenting and non-consenting stimuli or a greater responding to non-consensual stimuli, hence, a deviant profile. Conversely, scores below 1.00 indicate a greater responding to mutually consensual stimuli, hence, a non-deviant profile.

For the audio stimuli used in our study, Abel and his colleagues (1978) found that a RI cut-off score of 1.00 helped correctly identify 12 rapists (63.16%) out of 19 while correctly identifying 14 non-rapists (93.33%) out of 15. In a validation study with a French-speaking sex offender population, Earls and Proulx (1986) reported that a RI cut-off score of 0.90 allowed to correctly identify 10 rapists out of 10 and 8 non-rapists out of 10 (one of the two non-rapists identified as a rapist had admitted to having fantasies involving rape which he masturbated to). Due to the fact that DSM-5's proposed criteria (American Psychiatric Association, 2012) required that rapists show an equal or a similar sexual arousal to rape as opposed to consenting stimuli, that the available literature on PCD shows that rapists show a similar arousal to rape and consenting stimuli (e.g., Abel et al., 1978; Earls & Proulx, 1986; Lalumière et al., 2003; Thornton, 2010; Willmot & Hart, 1996), and that we were assessing the DSM-5's criteria, we chose to use a conservative RI cut-off score set at 1.00 (Lalumière & Quinsey, 1993).

Data Analytic Strategy

RI scores were computed for each participant by dividing mean response to rape stimuli by mean response to mutually consenting stimuli (deviance ratio). Based on RI scores, the entire sample was divided into two groups, a group with a *non-deviant profile* (RI < 1.00; n = 29, 61.70%) and a group with a *deviant profile* (RI ≥ 1.00; n = 18, 38.30%). Rape indices were also computed using z-scores. The z-score conversion has an advantage of eliminating idiosyncratic features of each individual's erectile response, thereby making comparisons across participants more meaningful (Marshall & Fernandez, 2003). To do so, the average scores per each category of interest (rape, consent, neutral) were transformed into z-scores for each participant. RI was then computed by subtracting the average response to consenting category from the average response to rape category. The differential RI led to the identical classification of participants into deviant (positive RI) and non-deviant groups (negative RI) as did the ratio index of deviance. RI scores and analyses reported herein are based on the ratio method.

A chi-square test for independence was conducted to examine associations of diagnostic groups with number of victims and with sexual recidivism. ROC analyses were also carried out to provide information on the overall classification accuracy for number of victims and RI scores. Spearman's rho was used to examine the degree of association between total number of victims and RI. A direct logistic regression was also performed to examine predictors of sexual recidivism among total number of victims, RI, Static-99, Stable-2007 and combined measures of the two latter variables. An alpha level for statistical tests was set at ≤.05. For the statistical analyses, IBM SPSS Statistics software (Version 22) was used.

Results

Preliminary Analyses

Accuracy of data file. First, the accuracy of data file was insured by examining the SPSS frequencies table. The minimum and maximum values, means and standard deviations for continuous variables were all plausible and there were no out-of-range numbers for discrete variables. Data entry errors, when found, were corrected.

Missing data. Second, missing data were examined. A maximum of 5% missing data is considered to be acceptable when their distribution is random (Tabachnick & Fidell, 2007). For only one continuous variable, RI, six participants (11.54%; $N = 52$) were missing data as raw PPG results were not available at the lab. Further examination of the assessment reports helped establish that one participant (1.92%) had obtained a deviant profile on the phallometric evaluation, whereas five participants (9.62%) had a non-deviant profile. As such, the former case was part of the deviant subgroup of the sample. The missing PPG scores for this participant were replaced by the average values of the membership group (deviant group) for the categories of stimuli that were of interest to us (mutual consent, rape and neutral) (Tabachnick & Fidell, 2007). Five participants with missing PPG data were dropped from the analyses.

Extreme scores. The presence of univariate outliers was verified by transforming all continuous variables into z scores. Among continuous variables, potential outliers are cases

with standardizes scores in excess of +/-3.29 ($p < .001$, two-tailed test). Of the five variables of interest (total number of victims, RI, Static-99, Stable 2007 and combined scores of actuarial risk assessment tools), two – *total number of victims* and *RI* – had an extreme score. Outliers can distort statistics, lead to both Type I and Type II errors and to results that do not generalize except to another sample with the same kind of outlier. The extreme scores for both variables, RI and total number of victims, were considered to be from the intended population and the decision was made to retain them. To address the issues associated with the outliers, extreme values for the two variables in question were transformed by replacing them with scores closer to the z score limit (+/-3.29). This was done in order to both improve the normality of distributions and to pull the univariate outliers closer to the center of the distribution, thereby reducing their impact (Tabachnick & Fidell, 2007).

After dealing with univariate outliers, the variables were screened for multivariate outliers. The criterion for multivariate outliers is *Mahalanobis distance* at $p < .001$ (Tabachnick & Fidell, 2007). It is evaluated in terms of critical chi-square (χ^2) value (where degrees of freedom are equal to the number of variables) beyond which a score is considered to be significant, in other words, a multivariate outlier. In the current case, no variables had a value greater than $\chi^2(5, N = 47) = 20.52$, $p < .001$ and thus, no participant in the data set had extreme multivariate scores.

Main Analyses

Observed frequencies. Following DSM-5 criteria, PCD diagnosis can be made when deviant "fantasies, urges or behaviors" (Criterion A) are combined with Criterion B: either (1) three victims or more (2010 criteria) or (2) one victim or more (2012 criteria). As stated previously, in the present study, the Criterion A was established using ratio index of deviance with RI cut-point set at 1.00. A detailed account of observed frequencies of sex offenders that were thus obtained (RI by number of victims) is reported in Table 3.

Table 3

Observed Frequencies of Sex Offenders Based on Crosstabulation of Ratio Index of Deviance by Number of Victims

	Ratio Index of Deviance Profile[a]		
	Deviant (n = 18)	Non-deviant (n = 29)	Total (N = 47)
Number of victims			
One	6 (12.77)	6 (12.77)	12 (25.54)
Two	5 (10.64)	8 (17.02)	13 (27.66)
Three and above	7 (14.89)	15 (31.91)	22 (46.80)
Total	18 (38.30)	29 (61.70)	47 (100.00)

Note. N = 47. The percentage equivalents are reported in parentheses.

[a]The cut-point for ratio index of deviance, or Rape Index, is set at 1.00. Scores <1.00 refer to a non-deviant profile and scores ≥1.00 refer to a deviant profile.

Table 4 shows the diagnostic subgroups of sex offenders that were constituted based on the 2010 and 2012 sets of DSM-5 criteria for PCD. Based on the proposed DSM-5 criteria for PCD, deviant PCD (≥3) group and deviant PCD (≥1) group would qualify as having the diagnosis of PCD. As such, the observed frequencies of PCD in our sample were 14.89% (n = 7) and 38.30% (n = 18) based on 2010 and 2012 diagnostic criteria, respectively.[1] Given that there is an important difference in the observed frequencies solely on the basis of the number of victims (Criterion B), observed frequencies more than doubling when 2012 criteria for PCD are used, it is imperative to test the validity of relying on number of vitims for diagnostic purposes (victim count hypothesis).

[1] Given that the conservative RI cut-point (≥1.00) used in the current study, as opposed to the cut-point of ≥0.80 commonly used in clinical settings, such as CÉRUM, could have decreased the number of individuals that met PCD diagnosis, the bracket for RI cut-point was extended to include participants with RI scores ≥0.80. The number of individuals who met PCD diagnosis passed from seven to nine (n = 9, 19.14%) and from 18 to 20 (n = 20, 42.55%) using 2010 and 2012 PCD diagnostic criteria, respectively.

Table 4

Diagnostic Groups Based on 2010 and 2012 DSM-5 Proposed Criteria for PCD

Diagnostic group	%	N
Diagnostic groups based on the 2010 criteria of the DSM-5		
Non-deviant RI profile and any number of victims (non-deviant)	61.70	29
Deviant RI profile and 1-2 victims (deviant non-PCD (<3))	23.41	11
Deviant RI profile and 3 victims or more (deviant PCD (≥3))[a]	14.89	7
Diagnostic groups based on the 2012 criteria of the DSM-5		
Non-deviant RI profile and any number of victims (non-deviant)	61.70	29
Deviant RI profile and any number of victims (deviant PCD (≥1))[a]	38.30	18

Note. $N = 47$. PCD = Paraphilic Coercive Disorder. Non-deviant RI profile refers to Rape Index scores <1.00 and deviant RI profile refers to scores ≥1.00.

[a]*Deviant ≥3 victims* and *deviant ≥1 victim* groups qualify as having a diagnosis of PCD.

Victim count hypothesis. To verify whether total number of victims is associated with PCD diagnosis, as defined in the proposed criteria of the DSM-5, a chi-square test for independence was conducted examining the two groups of rapists (non-deviant group and deviant PCD (≥1) group) (DSM-5, 2012). The number of victims (1-2 vs. ≥3) did not differ significantly by diagnostic groups, $\chi^2(1, N = 47) = .735$, $p = .391$, phi = -.125. Due to the fact that the three diagnostic groups of sex offenders (DSM-5, 2010) were constituted using three victims as a cut-off, chi-square test of independence was not conducted with these groups. Furthermore, a ROC curve did not show that the number of victims allows to discriminate among the two groups of sex offenders (DSM-5, 2012) (AUC = .57, $p = .45$) even when RI cut-point is set at ≥0.80 (AUC = .43, $p = .45$). Finally, there was a weak, negative and non-significant relationship between total number of victims and RI, $\rho = -.06$, $N = 47$, $p = .668$.

Ratio index of deviance. The average RI score observed in our sample was 0.99 ($M = 0.99$, $SD = 1.32$, $N = 47$). A ROC curve was examined to determine a cut-point at which RI score allowed to distinguish deviant non-PCD (<3) group from deviant PCD (≥3) group. The results indicate that RI is insufficient to allow such a discrimination (AUC = .50, $p = 1.000$).

Diagnostic subgroups and sexual recidivism. As of the year 2014, the overall rate of sexual recidivism in our sample was 10.64% (n = 5), with the follow-up period that ranged between 2 and 14 years (M = 9 years, SD = 4 years) for the whole sample. Next, we examined the relationship between diagnostic groups and sexual recidivism. Fisher's exact test indicated no significant association between group membership (non-deviant group and deviant PCD (≥1) group) and sexual recidivism, p = 1.000, phi = .01 (weak effect size), where 10.34% of sex offenders from non-deviant group and 11.11% from deviant PCD (≥1) group had sexually recidivated.[2] Similarly, chi-square test of independence indicated no significant association between the membership to the three groups (non-deviant, deviant non-PCD (<3) and deviant PCD (≥3)) and sexual recidivism, $\chi^2(2, N = 47) = .128$, p = .938, Cramer's V = .05 (weak effect size). In this case, 10.34%, 9.09% and 14.29% of sex offenders had sexually reoffended in non-deviant, deviant non-PCD (<3) and deviant PCD (≥3) groups, respectively.[3]

Logistic regression analysis. A direct logistic regression was performed to assess the impact of five independent variables – number of victims, RI, Static-99, Stable-2007 and combined measures of actuarial risk assessment tools – on the likelihood to sexually recidivate. As illustrated in Table 5, nearly half of the sample (46.81%) fell into "high" categories on both, Static-99 and Stable-2007 variables. The scores obtained on combined measures placed about forty five per cent of the sample into "high" overall supervision category. For each of the three categorical predictors, Static-99, Stable-2007 and combined measures, limited cases were observed in the "low" categories. Therefore, "low" category for Static-99, Stable-2007 and combined measures was collapsed with the adjacent "moderate-low", "moderate", and "moderate-low" categories for each of the three predictors,

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[2] With RI cut-point set at ≥0.80, Fisher's exact test showed no significant association between two groups and sexual recidivism, p = .148, phi = .26 (small to medium effect size). In this case, 3.70% and 20.00% of sex offenders had sexually recidivated in non-deviant and deviant PCD (≥1) group, respectively.

[3] With RI cut-point set at ≥0.80, a moderate to large and significant association was revealed between the three groups and sexual recidivism, $\chi^2(2, N = 47) = 6.27$, p = .04, Cramer's V = .37. More sex offenders from deviant PCD (≥3) group (33.33%) sexually recidivated than was expected. For non-deviant (3.70%) and deviant non-PCD (<3) groups (9.09%), the association with sexual recidivism did not reach critical level of significance.

respectively. Multicollinearity tests revealed that for all three categorical predictors, tolerance levels and VIFs were lower than 0.10 and higher than 10.00, respectively, indicating the presence of multicollinearity (Pallant, 2007). To address the problem of multicollinearity, the combined measures predictor was removed, as it had the lowest tolerance and highest variance inflation factor (VIF) scores (0.02 and 49.60, respectively). Multicollinearity was no longer evident.

Table 5

Observed Frequencies on Actuarial Risk/Need Assessment Tools

Actuarial tool	%	N
Static-99		
Low (0-1)	2.13	1
Moderate-Low (2-3)	10.64	5
Moderate-High (4-5)	40.43	19
High (6+)	46.81	22
Stable-2007		
Low (0-3)	2.13	1
Moderate (4-11)	51.06	24
High (12 +)	46.81	22
Combined measures		
Low	2.13	1
Moderate-Low	10.64	5
Moderate-High	19.15	9
High	44.68	21
Very High	23.40	11

Note. $N = 47$.

Following a direct logistic regression analysis, where the model with all four predictors of interest (number of victims, RI, Static-99 and Stable-2007) was examined, extremely high parameter estimates and standard errors were observed, indicating a problem in terms of the ratio of cases to variables. As such, each predictor was examined separately. For the remaining

predictors, only RI reliably distinguished between sex offenders who sexually reoffended from those who did not, χ^2 (1, N = 46) = 5.96, p = .015 (see Table 6). One outlier (ZResid value >2.5; Pallant, 2007) had been removed from the sample. The RI explained between 13.0% (Cox & Snell R^2) and 29.1% (Nagelkerke R^2) of the variance in sexual reoffending. The recorded odds ratio of 2.08 indicated that for every one-unit increase in RI, sex offenders were over twice as likely to sexually reoffend.

Table 6

Summary of Logistic Regression Analysis for Variables Predicting Likelihood of Sexual Recidivism

					95% Confidence Interval for Odds Ratio	
Predictors	*B*	S.E.	Wald (*df* = 1)	Exp(B)	*Lower*	*Upper*
Static-99						
Moderate-High	-0.29	0.97	0.09	0.77	0.11	0.01
High	0.60	0.96	0.38	1.82	0.27	12.01
Stable-2007						
Moderate	0.31	0.96	0.10	1.36	0.21	9.02
Number of victims	0.21	0.21	1.06	1.24	0.83	1.85
Rape Index	0.73	0.30	5.96*	2.08	1.16	3.75

Note. N = 47.

*p < .05

Discussion

Among the objectives of the present study, we evaluated the observed frequencies of PCD among a population of rapists of adult women using two different sets of diagnostic criteria for PCD that had been proposed for inclusion in the DSM-5. Findings showed that observed frequencies of PCD varied from 14.89% to 38.30% depending on the set of proposed criteria used. Furthermore, we investigated the validity of relying on number of victims to ascertain the presence of PCD. Victim count was not a valid criterion for diagnostic purposes and, as such, did not

help discriminate between diagnostic groups, supporting our hypothesis. Likewise, in line with our hypothesis, RI and number of victims were not significantly associated. We proceeded by assessing the rate of sexual recidivism in our sample and examined whether the diagnostic groups differed in terms of the rates of sexual recidivism. The sexual recidivism rate in our sample was 10.64%. The diagnostic groups had similar rates of sexual recidivism. Furthermore, we investigated actuarial tools (Static-99, Stable-2007 and combined measures), number of victims and RI to determine which variable of interest helped predict sexual recidivism. Contrary to our hypothesis, actuarial risk assessment tools did not help predict sexual recidivism. In line with our hypotheses, however, the RI helped predict sexual recidivism whereas total number of victims did not.

Observed Frequencies of PCD

Results suggest that the rates for PCD among a sample of high risk/high need incarcerated sex offenders released in the community might be higher than what the extant literature usually alludes to (e.g., American Psychiatric Association, 1985; Frances, 2011). They provide valuable data on the observed frequencies of PCD in the population of rapists who offend against adult women and who have come in contact with the authorities. However, these estimates are preliminary due to the small sample size.

Furthermore, the results of our study illustrate an important point, precisely, the drastic impact that a single defining criterion – number of victims – can have on prevalence rates. In our sample, 23.40% more sex offenders (n = 11) are diagnosed with PCD using 2012, as opposed to 2010 diagnostic criteria. This number may reach a whopping 100.00% when the specifier "or behaviors" from the Criterion A is applied and interpreted as the mere presence of victims. Although it is possible for all rapists in our sample to have an underlying PCD, it seems extremely unlikely given the heterogeneity of sex offender population. The implications of PCD diagnosis are not negligible, be it from social or legal perspectives, especially in the case of false positives. Therefore, it was important that the proposed thresholds for the number of victims as a criterion for PCD diagnosis were empirically validated.

Victim Count Hypothesis

When examining the minimum number of victims as a criterion for PCD diagnosis, our results did not support the victim count hypothesis, suggesting that there is no association between number of victims and a subgroup of rapists with a diagnosis of PCD. Although inferences between repetitive observable behaviors, such as multiple victims, and the presence of underlying fantasies of coercion and hence, paraphilic disorder, are commonly made, our results cast further doubt on such practice. Similar conclusion was drawn by Watson (2013). Although theoretically possible, it is unlikely that sexual preference is a relevant issue for all rapists. Rapists are heterogeneous in their characteristics (Prentky & Knight, 1991), including their motivation for rape. A substantial proportion of sexual coercion/rape can reflect general criminality and antisocial tendencies rather than an underlying sexual perversion (Frances & First, 2011; Knight, 1999; Lalumière, Harris, Quinsey & Rice, 2005). As such, relying solely on the victim count as evidence of PCD can be misleading, as it opens doors for abuse in the form of large numbers of false positive diagnoses, consequences of which can be costly.

Furthermore, as seen in Table 3, among sex offenders with a non-deviant profile, 15 participants (approximately a third of our sample) have three victims or more. These results suggest a poor match between the history of deviant behavior (multiple rapes) and sexual preferences as revealed at PPG testing, contrary to existing accounts (e.g., Abel et al., 1977; Hall et al., 1993). Results seem to cast doubt on the ability of the phallometric evaluation to adequately measure deviant sexual interests of sex offenders who offend against adult women. Nevertheless, our results have shown that there is no relationship between RI and number of victims. This suggests that the number of victims might not be the best criterion by which to judge the deviant sexual nature of a man who commits rapes, on one hand, and the ability of PPG to measure underlying deviant interests, on the other hand. It might be possible that men who show a non-deviant profile as per PPG results in our sample, and who are known to have committed at least three officially known rapes, are (1) not sufficiently aroused by the types of stimuli that are presented to them in the laboratory setting and/or (2) are better able to inhibit their sexual responses at least under the laboratory conditions or (3) their offending is not driven by deviant sexual interests. It would be pertinent to further investigate this subgroup of sex offenders to uncover personal characteristics, such as impulsivity vs. self-regulation,

which might help understand the findings observed in the present study and to develop stimuli that are better able to tap into underlying sexual interests of sex offenders.

Rape Index

The average RI score observed in our group of sex offenders is in line with what is generally reported in the literature. In other words, overall, rapists as a group tend to manifest a pattern of sexual arousal that reflects little discrimination between non-consenting and consenting stimuli (e.g., Lalumière et al., 2003; Willmot & Hart, 1996). It is likely that the observed profile – little discrimination between non-consenting and consenting stimuli – is accounted for by heterogeneity of sex offenders in our sample (i.e., mix of rapists with sexual and non-sexual motives for sexual offending). Furthermore, although RI may serve as a useful indicator of sexual interest profile (i.e., deviant, non-deviant) for a given sex offender, it alone does not enable us to conclude on the presence of parahilic disorder nor does it help us distinguish sex offenders based on the number of victims (1-2 vs. ≥3). It is imperative to explore and identify other variables, or moderators, that can be used, in combination with number of victims and RI data, to help identify and reliably discriminate between sex offenders that are criminals of general vs. sexual type.

Sexual Recidivism and its Predictors

The observed sexual recidivism rate in our sample was low (10.64%), comparable to the rates reported in the literature (e.g., Hanson & Bussière, 1998; Harris & Hanson, 2004). The observed rate should be considered an underestimate, however, given that the source of sexual recidivism data was an OMS database and research shows that the majority of offenses are not detected by the official sources (e.g., Bonta & Hanson, 1994; Fisher, Cullen, & Turner, 2000). Longer follow-ups increase recidivism base rates due to the fact that recidivists accumulate over time (Helmus, 2009). Taking this into consideration, a minimum of 5 years has been proposed as the optimal length of follow-up (Collaborative Outcome Data Committee, 2007). For only a minority of sex offenders in our sample (17.02%, n = 8), such was not the case, which may further contribute to low rates of sexual reoffense. Despite the low observed base rates for sexual recidivism overall (Hanson & Bussière, 1998; Helmus, 2009), sexual

offending cannot be ignored given the devastating impact it can have on victims (Becker et al., 1979; Hanson, 1990; Kilpatrick et al., 1992; Koss & Heslet, 1992; Rothbaum et al., 1992).

When the diagnostic groups were examined in terms of rates of sexual recidivism, no significant group differences were found. As such, our results suggest that groups with PCD and without PCD have similar rates of sexual recidivism. However, the difference between PCD and non-PCD groups was evidenced when the bracket for RI cut-point was extended to include 0.80. In this case, more sex offenders with PCD (i.e., deviant RI with ≥3 victims) reoffended sexually. These results raise the possibility that the inability to detect significant differences between groups is better explained by small sample size rather than the absence of actual group differences.

Of the variables that were examined, present results showed that RI helps predict sexual recidivism. Our results are in line with the current literature which indicates that the presence of deviant arousal is the strongest predictor of sexual recidivism (e.g., Hanson & Morton-Bourgon, 2004). It must be added that although RI seems to predict sexual recidivism, it only explains a fraction of variance (13.0% to 29.1%), leaving a big portion (70.9% to 87.0%) unaccounted for. Therefore, other variables must be considered in order to better account for and predict sexual recidivism. Our results did not reveal a relationship between actuarial risk assessment data and sexual recidivism despite reports of the good predictive accuracy of actuarial tools. This could be partly explained by the small sample size, low observed frequencies in some categories of actuarial predictors and overall low base rates for sexual recidivism observed in our study. Similarly, when taken alone, number of victims did not allow prediction of sexual recidivism. This may further cast doubt on the pertinence of relying on number of victims as a diagnostic criterion for PCD.

Limitations

The present study has limitations worth noting. First, our sample is small. As such, more conclusive results on prevalence rates of PCD require further research with larger samples. Small sample size and low base rates for sexual recidivism specifically limit statistical analyses and their power. Second, we lack information on the types of sex offenders that constitute our control group (e.g., opportunistic, “muted” sadistic, vindictive, and pervasively

angry). Without such information, we cannot make conclusions as to how our group of sex offenders with PCD compares to specific subtypes of sex offenders, taken individually. It would be pertinent to conduct a study comparing the PCD group with any of the abovementioned sex offender subtypes, as well as rapists with SSD. In this line of thought, it might also be pertinent to conduct studies with men who admit to having sexually coerced adult women but who have not come in contact with the authorities by assuring them of confidentiality. Such a group might be of particular interest to better our understanding of the true prevalence rates and the nature of PCD, including number and types of victims, offender-victim relationship, and presence of non-normative sexual activities within consenting relationships. However, recruiting such a sample will undoubtedly be challenging for ethical and legal considerations. Third, sex offenders in the present study were referred to our clinic from forensic settings for an elaborate psycho-phallometric evaluation and present high risk, high need profiles. Therefore, they might be seen as particularly extreme cases. This raises the question of generalizability of present results to sex offender population in general, especially to men who have never been apprehended by official sources. It would be pertinent to replicate current results in other populations of sex offenders to verify to what extent the results are applicable to sex offenders from various forensic settings. Similarly, the generalization of our results is limited to sex offenders who present a valid phallometric profile.

Implications for DSM Criteria for PCD and General Conclusion

Criterion B. Many have argued that victim count proposal is arbitrary (e.g., First, 2010; Wakefield, 2011; Wollert, 2011). Our results offer evidence in support to these arguments, suggesting that it may be indicated to exclude victim number specifications in Criterion B. Number of victims should be irrelevant for PCD diagnosis provided that, in the absence of victims, the person experiences clinical distress or disruption in functioning. When dealing with non-cooperative individuals, using one victim as a PCD criterion without carefully considering other relevant factors could increase the number of false positives, inflating the prevalence of PCD. Hence, despite the problems associated with relying on the number of victims, we propose that setting the threshold for minimum number of victims at three, in combination with other pertinent behavioral markers, such as exhibitionism (Freund & Seto,

1998), may help formulate conservative diagnostic criteria for PCD and limit the number of false positive diagnoses (see also Wakefield, 2011). Setting the victim count threshold at three is a noble attempt to balance public safety and protection of liberty rights of offenders. Unfortunately, it leads to false negatives and does not add protection for individuals involved in sexual predator commitment proceedings. As Wakefield (2011) astutely points out, most men are subjected to SVP laws only if they have been repeat offenders.

Criterion A. Given the problems associated with the Criterion B in relation to the number of victims cut-point, the integrity and specificity of Criterion A in identifying underlying paraphilic interests becomes of primal importance to distinguish a preferential rapist from a rapist who is a simple criminal. Unfortunately, as we saw, Criterion A is not without its shortcomings. One of the main concerns is that the reliance on behaviors, usually presence of victims, to lessen the dependence on patients' willingness to report presence of urges and fantasies (Task Force), perpetuates the problem of false positives and the associated legal ramifications in terms of civil commitment (First, 2010). This is especially true when the presence of victims is used to satisfy the requirement for both, Criterion A and Criterion B, in the absence of evidence pertaining to deviant sexual interests. As such, it might be prudent to limit the Criterion A formulation to the presence of "fantasies or urges". The retention of "or behaviors" specifier could be justified only if it explicitly refers to behaviors other than victims specified in Criterion B such as, for instance, exhibitionism (Agalaryan & Rouleau, 2014; Freund & Seto, 1998), role-playing rape scenarios with a consenting partner and using pornography thematically linked to non-consensual sex. Behavioral markers associated with rape-proneness, such as exhibitionism, may serve as useful specifiers for diagnostic purposes. However, at the present time, research on behavioral markers of PCD is scarce (but see Agalaryan & Rouleau, 2014; Freund & Seto, 1998). In the absence of incontrovertible evidence indicating that deviant sexual interests, fantasies and urges are driving sexual offending, repeat sex offender should be treated as a criminal without the associated stigma of mental illness.

In conclusion, the rejection of PCD from yet another diagnostic manual does, in no way, testify to the fact that the conceptual and empirical issues surrounding the legitimacy of PCD have been resolved. Consequently, it would have been premature to include PCD in the DSM-

5. The results of the present study provide answers to some of the extant questions, such as observed frequencies of PCD and the validity of relying on minimum number of victims for diagnostic purposes. There is yet much to be learned about the nature and the causes of rape and continued investigation of PCD independently of its inclusion in the DSM is warranted to that end. Until more tangible answers are obtained, it is unlikely that the fears surrounding the misuse of PCD and other concerns will be soothed. It is our hope that the repeated exclusion of PCD from DSM's main body as well as Section III of the manual will not hinder research into this challenging subject.

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CHAPTER IV – THIRD ARTICLE

Behavioral Markers of Paraphilic Coercive Disorder:
Types of Sexual Acts and Violent Behaviors Committed in the Context of Sexual Assault

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Abstract

Paraphilic Coercive Disorder (PCD) diagnosis was made in a sample of convicted sex offenders (N = 52) using 2010 and 2012 PCD criteria proposed for inclusion in the DSM-5. Offense conduct characteristics – sexual acts and violent behaviors – were investigated to examine whether diagnostic groups differed in the types of sexual acts and violent behaviors as well as overall levels of sexual intrusiveness and violence they resorted to. Furthermore, sex offender typologies were created on the basis of sexual acts and violent behaviors and subsequently, their association with age, total number of victims, Rape Index, PCD and levels of sexual intrusiveness and violence was examined. The results suggest that rapists with PCD are more sexually intrusive and resort to less violence overall than sex offenders without such a diagnosis and that *exhibitionism* and *fondling* could serve as behavioral markers for PCD. Moreover, rapists with PCD are characterised more by *indecent request, exhibitionism, fondling, masturbation, attempted intercourse* and *digital penetration* rather than by *intercourse* and *sodomy*. Rapists with PCD resort less to the *use of weapons*, seem not to *hit their victims*, and are likely characterised more by *manipulation* rather than by the use of *death threats, excessive force* and *weapons*.

Keywords: Paraphilic Coercive Disorder, behavioral markers, sexual acts, violent behaviors, rapist typology

Introduction

Rape is an unlawful behavior which is strongly condemned in the Western world. Various criminal laws and regulations targeting sex offenders, such as public notification of prison release, public registries of the names and addresses, residence restrictions (Human Rights Watch, 2007), longer prison sentences and increased punishments, including death penalty (Hylton, 2007), as well as sexually violent predator (SVP) laws in the United States (e.g., Stern, 2010), testify to that. Many theories have been proposed in an attempt to explain why men commit sexually aggressive behaviors despite such negative consequences. Although disentangling the motives for rape is not an easy task, the available literature indicates that sex offenders are a heterogeneous population and that the motives for sexual offending vary greatly (e.g., Barbaree, Seto, Serin, Amos, & Preston, 1994; Knight, 1999; Knight & Prentky, 1990; Marshall & Barbaree, 1990; Prentky & Knight, 1991; Seto & Barbaree, 1997). Research suggests that a substantial proportion of sexual coercion reflects general criminality, antisocial and risk-tolerant lifestyle tendencies rather than paraphilic interests (Frances & First, 2011; Knight, 1999; Lalumière et al., 2005). Nevertheless, a subset of rapists has been identified whose motivation is hypothesized to be primarily sexual in nature, in other words, marked by a presence of long lasting sadistic or non-sadistic sexual fantasies and enduring sexual preoccupation (e.g., Freund, Seeley, Marshall, & Glinfort, 1972; Knight, 1999; Knight, Rosenberg, & Schneider, 1985). The non-sadistic sexual rapists could potentially meet the diagnosis of Paraphilic Coercive Disorder (PCD).

PCD is known under different names, such as biastophilic rapism or raptophilia (Money, 1999), preferential rape (Freund & Seto, 1998), or biastophilia (Lalumière, Harris, Quinsey, & Rice, 2005). It refers to a subset of rapists whose sexual gratification stems from the cues of non-consent on the part of the victim. It is distinguished from Sexual Sadism Disorder (SSD) where it is the victim's physical and/or psychological suffering, pain and humiliation rather than coercion and non-consent that is the source of sexual arousal. Generally speaking, a coercive rapist, as opposed to a sadistic rapist, would not subject the victim to any additional, "unnecessary" harm to bring the sexual assault to completion (i.e., violence is instrumental). In other words, different subtypes of rapists are hypothesized to resort to different degrees of violence and force during sexual assault. Notably, research has shown that vindictive and

pervasively angry subtypes express anger and aggression in their sexual assaults, causing their victims high levels of intentional physical harm and injury (Knight, 1999). On the other hand, opportunistic subtypes commit their sexual assaults impulsively, often meditated by situational and contextual factors such as an encounter of a woman at a bar or during a commission of another crime, and use whatever force is necessary to complete the offense (Knight, 1999). A sadistic subtype can resort to gratuitous violence during sexual attack (expressing their sexual-aggressive fantasies) or not, depending on whether the sexual sadist is of "overt" or "muted" type, respectively (p. 312, Knight, 1999). For instance, Barbaree and his colleagues (1994), who compared rapists using the MTC:R3 classification system (Knight & Prentky, 1990), found that non-sexual rapist subtypes, consisting of vindictive and opportunistic subtypes, caused greater victim damage and were more violent in their offenses than sexual rapists, which consisted of non-sadistic and sadistic (of which 80.00% were "muted") subtypes.

It must be noted that despite four previous attempts to introduce PCD into the *Diagnostic and Statistical Manual of Mental Disorders*, including its most recent edition (DSM-5; American Psychiatric Association, 2013), it never made the cut. As such, the only category of paraphilic disorders in the DSM that targets sex offenders who victimize adult women is SSD even though only a minority of men who commit rape are afflicted by SSD (Craissati, 2005). Nevertheless, the use of PCD is largely accepted in clinical settings and in civil commitment proceedings under paraphilia not otherwise specified (NOS) with a *non-consent* or *rape* descriptor (First & Halon, 2008; Stern, 2010; Zander, 2008). In fact, after pedophilia, paraphilia NOS non-consent is, at 42.6%, the second most prevalent diagnosis among men subject to SVP laws (Jackson & Richards, 2007). Many attribute the rejection of PCD from the DSM to the difficulty clinicians and researchers have to accurately identify and differentiate rapists who are preferential types from other types of sex offenders.

A common practice with paraphilic disorders, such as PCD, has been to rely on easily available yet often limited information in order to make inferences about underlying sexual motives. In the case of PCD, a mere repetitive nature of the offense (i.e., more than one victim) has often served as evidence for the presence of PCD diagnosis although such practice has received criticism due to the lack of empirical support (e.g., Agalaryan & Rouleau, 2014, 2015; First, 2010; Wakefield, 2011; Wollert, 2011). The reliance on observable behavior is of

undeniable value given the propensity for dissimulation on the part of forensic psychiatric patients of their underlying deviant sexual interests and urges, on one hand, and the limitations in the ability of currently available assessment tools to provide such information with accuracy, on the other hand. However, the data on clinically relevant and empirically validated behavioral markers associated with PCD is scarce, probably, at least in part, due to its repeated rejection from the DSM which undoubtedly thwarts research in this area. In order to contribute to the extant empirical body of literature pertaining to PCD, we investigated whether convicted sex offenders with a purported PCD could be reliably distinguished from sex offenders without such a diagnosis on the basis of offense conduct characteristics, focusing on sexual acts and violent behaviors committed in the context of sexual assault. The goal of the present study was to identify behavioral markers associated with rape-proneness that could aid with the diagnosis of PCD. The contrast between sex offenders with and without PCD is meaningful due to the controversial nature of PCD, its frequent use in clinical and legal settings, and the difficulties that clinicians face when it comes to identifying a small group of rapists with a purported PCD within a vast heterogeneous pool of sex offenders without such a diagnosis.

Diagnostic Challenge Inherent in Paraphilic Disorders

The extant scientific literature seems to lend credence to the existence of the hypothesized PCD diagnosis. For instance, on one hand, numerous clinical accounts document that a small group of men exists with paraphilic interest in coercive sexuality (e.g., Abel, Becker, Cunningham-Rathner, Mittelman & Rouleau, 1988; Abel & Rouleau, 1990; Freund, Scher, Racansky, Campbell, & Heasman, 1986; Freund, Seeley, Marshall, & Glinfort, 1972; Lalumière & Rice, 2007; Money, 1984). On the other hand, studies using phallometric data suggest that in the laboratory settings, sexual arousal to rape stories uniquely and reliably distinguishes rapists from non-rapists (Earls & Proulx, 1986; Hall, Shondrick, & Hirschman, 1993; Lalumière, Harris, Quinsey, & Rice, 2005; Lalumière & Quinsey, 1994) and that sexual interest in non-consent or indifference to consent can contribute to the unique sexual interests of rapists (Harris, Lalumière, Seto, Rice, & Chaplin, 2012). Overall, PCD seems to meet the basic requirements of a diagnostic category, such as grounding in the theoretical, clinical, and empirical research literature; descriptive criteria to differentiate the disorder from other

conditions and acceptable reliability as well as perceived utility of its application in clinical settings (Richards & Jackson, 2011). However, there are diagnostic challenges that seem to contribute to the repeated exclusion of PCD from the DSM and feed the critiques directed at its use.

The main challenge regarding PCD is how to accurately identify a small group of men with a purported PCD amid a heterogeneous pool of sex offenders. A diagnostic challenge inherent in paraphilic disorders is how to properly determine the sexual motivations (Criterion A; Tables 1 and 2) underlying observed violence and other offense characteristics when overt admissions of deviant sexual interests are a rare occurrence. This is especially true in PCD's case, given the threat of severe, potentially lifelong legal sanctions. Inferences about deviant sexual interests are often based on easily available information, such as presence of multiple victims (Criterion B; Tables 1 and 2). However, the reliance on the victim count is not supported by the extant literature (e.g., Agalaryan & Rouleau, 2014, 2015).

Table 1

The 2010 Criteria of Paraphilic Coercive Disorder (PCD) Proposed for Inclusion in the DSM-5 and Available on the APA Website in 2010

A. Over a period of at least six months, recurrent, and intense sexual arousal from sexual coercion, as manifested by fantasies, urges, or behaviors.
B. The person has clinically significant distress or impairment in important areas of functioning, or has sought sexual stimulation from forcing sex on three or more nonconsenting persons on separate occasions, and
C. The diagnosis of PCD is not made if the patient meets criteria for a diagnosis of Sexual Sadism Disorder.

Inferring motives from and equating them with behaviors without empirical basis to support such inferences does not lead to a reliable diagnosis, and consequently, also affects the validity of such a diagnosis. Attributing a diagnostic label to someone when it is not justified can have uniquely negative and serious consequences, especially in the case of highly controversial diagnosis such as PCD (e.g., inappropriate and possibly indefinite civil commitment to a

secure forensic psychiatric facility, First, 2010; possible deprivation of procedural due process rights for life, Hinderliter, 2010; unnecessary stigma).

Table 2

The 2012 Criteria of Paraphilic Coercive Disorder (PCD) Proposed for Inclusion in the DSM-5 and Available on the APA Website in 2012

A. Over a period of at least 6 months, an equal or greater arousal from sexual coercion than from consensual interaction, as manifested by fantasies, urges, or behaviors.
B. The person has acted on these sexual urges with a nonconsenting individual, or the sexual urges or fantasies cause marked distress or impairement in social, occupational, or other important areas of functioning.
C. The diagnosis of PCD is not made if the patient meets criteria for a diagnosis of Sexual Sadism Disorder.
D. The individual is at least 18 years of age.

The penile plethysmography (PPG) or phallometry has provided an objective means of evaluating the presence of deviant sexual interests in coercive sexuality (Criterion A). The relative arousal to rape as opposed to consenting stimuli, known as Rape Index (RI), has been the variable of most interest when studying PCD. In fact, Lalumière and Rice (2007) have noted that RI is the variable that most consistently and maximally distinguishes rapists from other men, including offenders who have not committed sex offenses. Despite the value of phallometric assessment in the treatment planning, assessment of treatment effectiveness and prediction of the likelihood of recidivism (Marshall & Fernandez, 2000), it has some limitations. For instance, PPG may be subject to voluntary control of erectile response on the part of the offender to fake normal responses (e.g., Marshall & Fernandez, 2000), it may lead to uninterpretable results (i.e., non-/low-responders) or may be unavailable (e.g., refusal to consent to the PPG evaluation). Although PPG is considered to be the gold standard for the assessment of deviant sexual interests, there is a need to identify objective markers related to rape-proneness. Objective markers of PCD, in combination with phallometric data, may help reliably distinguish paraphilic rapists from rapists that are simple criminals while allowing less reliance on the sex offenders' willingness to report their deviant sexual fantasies and urges.

Current Knowledge about Behavioral Markers of PCD

Relatively little work has been conducted to examine rapists' characteristics as opposed to other offender groups, such as child sex offenders. Furthermore, most of the research examining behavioral markers has focused on sexual sadism (e.g., Dietz, Hazelwood, & Warren, 1990; Marshall & Kennedy, 2003). There is a slow, growing body of literature comparing sadistic sex offenders with non-sadistic sex offenders (e.g., Barbaree et al., 1994; Gratzer & Bradford, 1995; Marshall, Kennedy & Yates, 2002) and targeting PCD more specifically (e.g., Doren, 2002; Richards & Jackson, 2011; Zinik & Padilla, 2010). For instance, a number of offense characteristics, including clear signs of sexual arousal (such as ejaculation) during events that are clearly non-consensual, repetitive patterns of actions as if they were scripts (Doren, 2002), wide range of victims, and self-reports of coercive sexual fantasies with masturbation (Zinik & Padilla, 2010) have been reported for PCD diagnostic purposes. Furthermore, Richards and Jackson (2011) compared sexual sadists with sex offenders with a diagnosis of paraphilia NOS, *non-consent,* within a sample of civilly committed individuals. They reported that sexual dysfunction during the offense and infliction of a facial injury were significantly associated with PCD rather than SSD. Furthermore, although statistically non-significant, taking items of personal significance from victims and keeping trophies of the offense were unique to PCD similar to Zinik and Padilla's (2010) proposal. However, Doren (2002) has advanced that a similar item, "taking trophies from the assault", characterised rapists with SSD as opposed to PCD. The use of weapons has been reported in association with sadistic as opposed to non-sadistic rapists, whereas no such association was observed between sexual and non-sexual rapists, as per Knight's (1999) classification system of rapists (Barbaree et al., 1994).

In addition to various offense characteristics reported in relation to PCD, there is considerable empirical evidence showing that paraphilias in general tend to co-occur (Abel et al., 1988; Seto, Kingston, & Bourget, 2014), such as exhibitionism and frotteurism (e.g., Taylor, 1947), and exhibitionism and rape (e.g., Bradford, Boulet, & Pawlak, 1992; Gebhard, Gagnon, Pomeroy, & Christenson, 1965; Simon, 2000). In their theory of courtship disorder, Freund and Kolarsky (1965) proposed that some rapes reflect distortions of normal courtship process in males, specifically the copulatory phase in which the intercourse occurs. In fact,

exhibitionism, frotteurism, voyeurism and preferential rape are all hypothesized to be paraphilic in nature and are thought to reflect distortions of the four phases of normal courtship process, specifically finding phase, affiliative phase, tactile phase, and copulatory phase, respectively (Freund & Kolarsky, 1965). This hypothesis is supported by high comorbidity of paraphilias observed amongst sex offenders. Based on the results of their study, Freund and Seto (1998) have proposed that the presence of another paraphilia, especially engaging in exhibitionistic activity, may be a useful behavioral marker for preferential rape, especially in the absence of phallometric data, notably because the two co-occur and furthermore, exposing one's genitals to a stranger is rare in control groups (Freund, 1990).

Despite the growing number of studies, the research on reliable and valid assessment scales and behavioral markers specific to PCD is meager. Furthermore, studies lack precision as to how exactly the diagnosis of PCD was made or how non-sadistic sexual groups were constituted (e.g., Marshall, Pam Kennedy, & Yates, 2002; Richards & Jackson, 2011), which makes meaningful comparisons across studies difficult. Pursuing in this direction is of primal importance to better our understanding of PCD and to promote its diagnostic accuracy.

Objectives and Hypotheses

In the present study, the diagnosis of PCD was made using two sets of PCD diagnostic criteria that were proposed for inclusion in the DSM-5 (Tables 1 and 2). The main objective was to identify behavioral markers associated with PCD. An overarching objective of the study was to examine the ability of DSM's criteria for PCD (American Psychiatric Association, 2010, 2012) to formulate a meaningful diagnostic group of preferential rapists with associated and distinct offense conduct characteristics. We reasoned that because sexuality and aggression are often merged in the context of sexual assault, and given the "instrumental" role that violence is said to play in PCD, both sexuality and violence are relevant elements to investigate. As such, we focused our attention on the information that is typically available to forensic evaluators, specifically sexual acts/paraphilic activities and behaviors of violent nature that were committed in the context of sexual assault (see Offense conduct information, under Measures section).

First, we examined whether the diagnostic groups differed in the overall levels of sexual intrusiveness and violence committed during sexual assault. We hypothesized that rapists with PCD would show a higher level of sexual intrusiveness than non-paraphilic sex offenders as a result of the cumulative effect of resorting to a large spectrum of paraphilic behaviors. Our hypothesis was in accordance with research data that suggest high levels of comorbidity between rape and other paraphilic disorders, especially those within courtship disorder hypothesis (Freund, 1990; Freund, Seto, & Kuban, 1997; Freund & Watson, 1990), such as exhibitionism (Abel et al., 1988; Freund & Seto, 1998; Gebhard, Gagnon, Pomeroy, & Christenson, 1965; Simon, 2000; Stermac & Hall, 1989) and frotteurism (Abel et al., 1988). In terms of violence, research has shown greater victim damage and violence within non-sexual group of rapists than sexual rapists (Barbaree et al., 1994), on one hand, and greater reported use of violence, aggression and physical harm and injury by vindictive and pervasively angry subtypes in comparison to sexual non-sadistic subtype (Knight, 1999), on the other hand. Assuming that the non-paraphilic comparison group in our sample consists of various subtypes of sex offenders (vindictive, pervasively angry and opportunistic), we hypothesized that the PCD groups would resort, overall, to a lesser amount of violence than non-paraphilic groups of sex offenders. As secondary objectives, we investigated the association between deviant sexual interests (coercion), as measured by RI, and level of violence, as well as between overall levels of sexual intrusiveness and violence. To assess the possibility that any significant group differences found in the overall levels of sexual intrusiveness and violence were not better accounted for by the total number of victims, we examined the association of number of victims with (1) the level of sexual intrusiveness and with (2) the level of violence. Additionally, we examined whether the total number of victims differed significantly between the diagnostic groups.

Second, we investigated whether convicted sex offenders with a diagnosis of PCD could be reliably distinguished from sex offenders without such a diagnosis on the basis of offense conduct characteristics. In terms of sexual acts, we postulated that rapists with PCD (American Psychiatric Association, 2010, 2012) would resort to a variety of paraphilic activities, especially fondling, exhibitionism and vaginal intercourse. In terms of violent behaviors, we expected to observe some forms of violent behaviors among PCD groups, such

as threats and use of force. However, we hypothesized that the use of excessive force, the use of weapons, and resorting to hitting the victim and victim confinement would not be associated with PCD group as they were most commonly reported in association with sexual sadism (Barbaree et al., 1994; Dietz et al., 1990; Gratzer & Bradford, 1995; Knight, 1999).

Finally, we explored whether, overall, sex offenders in our sample could be classified into meaningful groups based on their sexual acts and violent behaviors, independently of their status on PCD diagnosis. Finally, we tested whether the groups that were thus obtained had distinct characteristics in terms of age, number of victims, Rape Index, levels of sexual intrusiveness and violence and what the groups' association with the diagnostic groups was.

Method

Participants

Files of 89 sex offenders having sexually assaulted adult females (15 years of age and older) were reviewed. A sex offender was included in the study if he had a minor victim aged 14 and younger on the condition that (1) total number of adult victims was greater than total number of minor victims and/or (2) the offender was no more than five years older than the victim at the time of the sexual offense. Moreover, to be included in the study, a sex offender had to have undergone a phallometric assessment. A total of 18 participants were excluded from the study of which 14 manifested sadistic behaviors (e.g., physical torture, including burning and cutting off body parts) and four had not undergone a phallometric evaluation for either technical problems, refusal to consent to PPG evaluation, or because the PPG was not adapted for the participant's genital. Of the remaining 71 participants, 19 (26.76%) sex offenders with invalid PPG[1] results were excluded from the study.

The final sample consisted of 52 (N = 52) sex offenders, including five participants for whom all the variables of interest were available to the exception of raw PPG results (prior assessment reports provided information on the participants' phallometric profile). The mean age for

[1] PPG results were considered to be valid when a penile response was ≥2.5mm amplitude *and* at least one sexual category had a score greater than the score on the *neutral* category.

the sample was 37.27 years (*SD* = 8.44). Total number of victims varied between 1 and 13 (*M* = 2.90, *SD* = 2.20). The length of sentence varied from 2 years to 25 years to life in duration (*M* = 78.81, *SD* = 68.38, reported in months). The sample was predominantly Caucasian (78.85%), 15.38% was Native American and 5.77% was Black. Most sex offenders were heterosexual (96.15%) while the remainder (3.85%) were bisexual. At the time of the assessment, most sex offenders (65.38%) were single, 17.31% were in a common-law union, and the rest were either in a relationship (1.92%), married (5.77%), separated (5.77%), or divorced (3.85%). Almost half of the sample (46.15%) had victims who were all strangers to the offender, 19.23% had at least one victim who was a stranger, 30.77% had at least one victim who was unrelated to the offender and 3.85% had victims who were all related to the offender. While four sex offenders (7.69%) had an accomplice at least on one occasion during sexual assault, the majority (92.31%) operated alone. Over half of the sample (57.69%) had one sentence related to a sexual offense, whereas the remainder (42.31%) consisted of repeat sex offenders with either two or more sentences related to a sexual offense. Combined measures of actuarial instruments, Static-99 (Hanson & Thornton, 2000) and Stable 2007 (Hanson, Harris, Scott, & Helmus, 2007), placed 86.54% of the sample into moderate-high to very high risk categories and 13.46% into low to low-moderate recidivism risk categories.

Procedure

All sex offenders included in the present study were referred to *Centre d'Études et de Recherche de l'Université de Montréal* (CÉRUM) for a phallometric evaluation of their sexual interests between the years 2000-2012 and had at least one conviction for sexual assault. According to criminal law in Canada, a conviction for sexual assault requires a proof beyond reasonable doubt of two basic elements: the *actus reus* and the *mens rea.* The *actus reus* of assault refers to the touching that is of sexual nature and without consent. The *mens rea* refers to the intention to touch, and "knowing of, or being reckless of or willfully blind to, a lack of consent, either by words or actions, from the person being touched" (*R. v. Ewanchuk*, 1999). Although sexual assault is coercive by definition, it does not require aggression/violence; it can qualify as such by simple absence of consent (*R. v. Daigle*, 1998).

At the time of the assessment, all the sex offenders were released from the federal penitentiaries from across Canada where they were serving time for two years or more. All sex offenders had given a written informed consent to the assessment process as well as the authorization that the various test results be used for research purposes, such as this one (see Appendix A). After the assessment process, all sex offenders were to take part in the treatment program if deemed pertinent. In order to build the database for the study, all relevant information was obtained and coded from the assessment reports complemented by the official sources such as Offender Management System (OMS) database.

Measures

Stimuli. Audio stimuli consisted of narratives developed by Abel, Blanchard, Becker, and Djenderedjian (1978) which were later translated and validated within French-speaking population by Earls and Proulx (1986). They consisted of mutually consenting sexual interactions, rape, and non-sexual physically violent assaults. Rape involving humiliation (Proulx, Aubut, McKibben, & Côté, 1994) and neutral stimuli were also included for a total of five categories, with two to three stimuli per category. It must be noted that the two sets of stimuli, non-sexual physically violent assaults and rape involving humiliation, had not been systematically administered to all participants. For this reason, we focused on three categories of stimuli that were relevant to this study and were common to all participants: mutually consenting sexual interactions, rape, and neutral stimuli.

Phallometric assessment results were obtained from the laboratory at CÉRUM. During the initial assessment process, raw PPG data were obtained by subtracting the baseline level observed at the beginning of a testing session from the peak response occurring during stimulus presentation. Consequently, mean scores were computed for each category of stimuli. In order to ensure that participants were not using cognitive strategies to distract themselves and suppress their sexual response during phallometric assessment, they were asked to provide a description of the material they were exposed to. The stimuli were presented in an alternate fashion so that two stimuli from the same category never followed one another. It has been shown that the use of more than one stimulus per category during plethysmographic assessment increases validity and reliability of the results (Harris, Rice, Quinsey & Chaplin,

1996; Lalumière & Quinsey, 1994) and that the repetition of stimuli is essential to the discriminate validity of the PPG results (Frenzel & Lang, 1989).

RI and diagnostic groups. The RI was computed using ratio method (mean response to rape stimuli divided by mean response to mutually consenting stimuli). Earls and Proulx (1986) reported that a RI cut-off score of 0.90 allowed to correctly identify 10 rapists out of 10 and 8 non-rapists out of 10 (one of the two non-rapists identified as a rapist had admitted to having fantasies involving rape which he masturbated to). In the present study, a conservative cut-off point of 1.00 was used (Lalumière & Quinsey, 1993), where scores ≥1.00 indicate a greater responding to non-consenting stimuli, hence a deviant profile, and scores <1.00 indicate a non-deviant profile. Based on the RI cut-point, the sample was divided into two groups: *non-deviant group* (*n* = 34; 65.38%) and *deviant group* (*n* = 18; 34.62%). Based on the DSM-5's proposed criteria for PCD (Tables 1 and 2), the final sample was classified into two sets of sex offenders, with three (2010) and two (2012) subgroups of sex offenders within each set (see Table 3). Sex offenders

Table 3

Diagnostic Groups Based on 2010 and 2012 DSM-5 Proposed Criteria for PCD

Diagnostic group	%	N
Diagnostic groups based on the 2010 criteria of the DSM-5		
Non-deviant RI profile and any number of victims (non-deviant)	65.38	34
Deviant RI profile and 1-2 victims (deviant non-PCD (<3))	21.15	11
Deviant RI profile and 3 victims or more (deviant PCD (≥3))[a]	13.46	7
Diagnostic groups based on the 2012 criteria of the DSM-5		
Non-deviant RI profile and any number of victims (non-deviant)	65.38	34
Deviant RI profile and any number of victims (deviant PCD (≥1))[a]	34.62	18

Note. *N* = 52. PCD = Paraphilic Coercive Disorder. Presence of deviant sexual interests (Criterion A) was established via ratio index of deviance, or Rape Index (RI), using 1.00 as a cut-point. Sores <1.00 reflect a non-deviant profile and scores ≥1.00 reflect a deviant profile.
[a]*Deviant PCD (≥3)* and *deviant PCD (≥1)* groups qualify as having a diagnosis of PCD.

in both, the deviant PCD (≥3) group and the deviant PCD (≥1) group would qualify as having a diagnosis of PCD following the DSM-5's 2010 and 2012 criteria, respectively. The term *preferential* rapist will be used occasionally to designate sex offenders with PCD.

Offense conduct information. First, all offense characteristics pertaining to sexual acts and violent behaviors were identified and indexed for each participant across all his officially documented sexual offenses. Offense characteristics that were not consistently documented were dropped from the study (e.g., offense duration, ejaculation). This led to the identification of 12 acts of sexual nature (see Table 4) and 11 behaviors of violent nature (see Table 5).

Table 4

Offense Sexual Conduct and Observed Counts

Type of sexual act	%	N
Indecent request	17.31	9
Exhibitionism	11.54	6
Fondling	36.54	19
Masturbation of or by victim	9.62	5
Fellatio	19.23	10
Forcing oral sex on victim	9.62	5
Attempted intercourse	9.62	5
Completed intercourse	78.85	41
Attempted sodomy	3.85	2
Completed sodomy	15.38	8
Attempted digital penetration	1.92	1
Digital penetration	13.46	7

Note. $N = 52$. For each rapist, sexual acts against all his officially known victims are reported.

Table 5

Offense Violence and Observed Counts

Type of violent behavior	%	N
Insult	9.62	5
Confinement	13.46	7
Trickery	7.69	4
Manipulation	17.31	9
Threats	19.23	10
Death threats	34.62	18
Use of force	67.31	35
Hitting	13.46	7
Use of drugs	1.92	1
Use of excessive force	28.85	15
Use of weapons[a]	51.92	27

Note. $N = 52$. For each rapist, violent behaviors against all his officially known victims are reported.

[a]Includes a wide range of tools, such as firearms, knives, and screwdrivers.

Second, given that we were interested in the spectrum of sexual acts and violent behaviors that sex offenders with PCD resorted to, we thought to compute a total level of sexual intrusiveness and violence which best reflected the *repertoire* of sexual and violent acts that the sex offender resorted to. To do so, each new occurrence of sexual act and violent behavior was retained for each sex offender for the analyses. In other words, repeated sexual acts and violent behaviors, when present, either towards the same victim or different victims, were not counted. This strategy helped control for the frequency of occurrence of a given behavior and indirectly, offered a partial control for the number of total victims that differed across sex offenders.

Two independent raters – the main researcher and a graduate student in clinical psychology working with sex offenders – scored each sexual act and violent behavior to capture the level of sexual intrusiveness and severity of violence. The graduate student did not

have access to the sex offenders to which the sexual acts and violent behaviors were associated, and he was blind to the research hypotheses. Each sexual act and violent behavior was attributed a score using a 5-point scale that ranged from 1 to 3 (1, 1.5, 2, 2.5 and 3), ranking them from the least intrusive or violent to the most intrusive or violent. The percentage of exact and adjacent agreement (i.e., the percentage of times ratings fell within one performance level of one another) was 100.00% for violent behaviors and 91.67% for sexual acts, which is considered to be an acceptable level of inter-rater agreement (Graham, Milanowski, & Miller, 2012). The few disagreements between raters were settled collaboratively. Both, sexual acts and violent behaviors were distributed into five general categories (see Tables 6 and 7, respectively). For instance, for the sexual acts, the *non-contact* category (e.g., indecent request) was given the lowest scores whereas the *contact with genital to genital penetration* category (e.g., vaginal intercourse) was given the highest scores. As to the violent behaviors, the *verbal coercion* category (e.g., manipulation) was given the lowest scores whereas the use of excessive force (e.g., repeatedly smashing the head of the victim against the stairs), from the *excessive physical violence* category, had the highest scores. At the end, the sum of the scores for each sexual act, on one hand, and violent behavior, on the other hand, was computed for each sex offender to obtain the maximum range, reflecting the variables *sexual intrusiveness* and *violence*, respectively.

Data Analytic Strategy

The one-way Analysis of Variance (ANOVA) and the t-tests were executed to determine whether there were any significant differences between the means of three and two diagnostic groups, respectively, on the variables of interest (e.g., levels of sexual intrusiveness and violence). In order to examine whether sex offender typology can be created on the basis of the sexual acts, on one hand, and violent behaviors, on the other hand, a two-step cluster analysis was conducted. This procedure forms clusters based on the distance criterion as measured by the corresponding change in log-likelihood. Number of clusters in the clustering procedure is determined via the Beyesian Information Criterion (BIC). The model with the lowest BIC is retained, as it indicates a better model, i.e., with the least amount of overlap among clusters. A chi-square test for independence was conducted to examine associations between diagnostic

groups and (a) sexual acts, (b) violent behaviors and (c) typologies of sex offenders. Pearsons' *r* and Spearman's rho were used to examine the degree of association between the continuous variables of interest. Alpha level for statistical tests was set at ≤.05. For the statistical analyses, IBM SPSS Statistics software (Version 22) was used.

Table 6

Anchors for Rating Level of Intrusiveness for Sexual Acts Committed during Sexual Assault

Sexual acts	Anchor
Non-contact	1
Indecent request	
Exhibitionism	
Attempt at penetration	1.5
Digital penetration	
Vaginal penetration (intercourse)	
Anal penetration (sodomy)	
Contact without penetration	2
Fondling	
Masturbation of or by victim	
Forcing oral sex on victim	
Contact with penetration	2.5
Fellatio	
Digital penetration	
Contact with genital to genital penetration	3
Vaginal penetration (intercourse)	
Anal penetration (sodomy)	

Table 7
Anchors for Rating Level of Violence for Violent Behaviors Committed during Sexual Assault

Violent behaviors	Anchor
Verbal coercion	1
Insult	
Trickery	
Manipulation	
Coercion	1.5
Threats	
Use of drugs	
Implicit or explicit threat (death/injury)	2
Use of weapons[a]	
Death threats	
Confinement	
Physical coercion/violence	2.5
Hitting	
Force	
Excessive physical violence	3
Excessive force	

[a]Includes use of firearms, knives, screwdrivers, etc.

Results

Preliminary Analyses

Preliminary analyses revealed that the assumption of normality for the variables *total number of victims* and *RI* was not respected. Extreme values for the two variables were transformed by replacing them with scores closer to the z score limit (+/-3.29) in order to both improve the normality of distributions and to pull the univariate outliers closer to the center of the distribution, thereby reducing their impact (Tabachnick & Fidell, 2007).

Main Analyses

Level of sexual intrusiveness during sexual assault. First, we examined whether diagnostic groups differed in terms of the level of sexual intrusiveness used. For the entire sample, total scores on *sexual intrusiveness* ranged from 1.00 to 11.50 (M = 4.70, SD = 2.28). On one hand, there was no statistically significant difference in the level of sexual intrusiveness between the deviant PCD (≥1) (M = 5.17, SD = 2.63) and the non-deviant groups (M = 4.46, SD = 2.08); $t(50) = 1.07$, $p = .290$ (DSM-5, 2012). The magnitude of the difference in the means (mean difference = 0.71) was small ($R^2 = .02$) (Cohen, 1988). On the other hand, there was a significant difference between three groups of sex offenders (DSM-5, 2010) in the level of sexual intrusiveness used, $F(2, 49) = 4.91$, $p = .011$. For the post hoc comparisons, due to the unequal sample sizes, a conservative Scheffé test was used. Scheffé post-hoc results indicated that the deviant PCD (≥3) group was significantly more sexually intrusive (M = 7.00, SD = 2.55) than the deviant non-PCD (<3) (M = 4.00, SD = 2.01) and the non-deviant groups (M = 4.46, SD = 2.08). There was no significant difference between the non-deviant and the deviant non-PCD (<3) groups. There was a large effect size ($R^2 = .17$) (Cohen, 1988). In other words, the group membership explains approximately 17% of variance in the level of sexual intrusiveness used during the commission of sexual offence.

Offense sexual conduct. Next, we investigated whether certain types of sexual acts were unique to groups of sex offenders with PCD. When looking at two groups (DSM-5, 2012), there was a significant association between group membership (non-deviant and deviant PCD (≥1) group) and 2 acts of sexual nature of 12: *fondling*, $\chi^2(1, N = 52) = 4.29$, $p = .038$, phi = .29 (moderate effect size) and *exhibitionism, p* = .015 (Fisher's exact test), phi = .37 (moderate effect size). Significantly more sex offenders in the deviant PCD (≥1) group resorted to fondling (55.56%) and exhibitionism (27.77%) as opposed to sex offenders in the non-deviant group (26.47% and 2.94%, respectively). For the remaining 10 variables, no significant associations were found with group membership.

Similar results were observed when looking at three groups (DSM-5, 2010). There was a significant association between group membership and sexual acts, such as fondling, $\chi^2(2, N = 52) = 14.05$, $p = .001$, Cramer's $V = .52$ (large effect size) and exhibitionism, $\chi^2(2, N = 52) =$

16.79, $p < .001$, Cramer's $V = .57$ (large effect size). Precisely, in the deviant PCD (≥3) group, the percentage of sex offenders who resorted to fondling (100.00%) and exhibitionism (57.14%) was significantly greater than in the non-deviant group where, in turn, significantly less sex offenders resorted to fondling (26.47%) and exhibitionism (2.94%) than was expected. Despite the overall association between group membership and fondling and exhibitionism, the adjusted residuals for the deviant non-PCD (<3) group did not reach statistical significance for these variables (27.27% and 9.09%, respectively). As such, the pattern of fondling and exhibitionism in the deviant non-PCD (<3) group was not significantly lower from the expected count or the overall percentage of sex offenders in the entire sample who resorted to fondling (36.54%) and exhibitionism (11.54%).

Classification of sex offenders based on sexual acts. The two-step cluster analysis revealed two clusters (see Table 8). Cluster 1 (n = 35) consists mainly of *completed intercourse* and *completed sodomy.* It is to be noted that three items, *forcing oral sex onto the victim, attempted sodomy* and *attempted digital penetration*, were unique to cluster 1, even though neither of these items reached statistical significance. All three were low-frequency behaviors (ns = 5, 2 and 1, respectively). Cluster 2 (n = 17) consists mainly of *indecent request, exhibitionism, fondling, masturbation, attempted intercourse* and *digital penetration*. The silhouette measure of cohesion and separation, a measure of clustering solution's overall goodness-of-fit, indicates a satisfactory cluster quality.

When sex offenders in cluster 1 and cluster 2 were compared on the variables of interest (age, number of victims, RI and levels of sexual intrusiveness and violence), no significant differences were found as demonstrated by independent samples t-tests. Consequently, a chi-square test for independence revealed a significant association between two groups (non-deviant and deviant PCD (≥1)) and two clusters, $\chi^2(1, N = 52) = 3.75$, $p = .053$, phi = .27 (moderate effect size). In the non-deviant group, significantly more sex offenders resorted to intercourse and sodomy (76.47%) than to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration (23.52%). Additionally, significantly more sex offenders in the non-deviant group (76.47%) than in the deviant PCD (≥1) group (50.00%) resorted to intercourse and sodomy. Conversely, significantly more sex offenders in the deviant PCD (≥1) group (50.00%) than in the non-deviant group (23.52%)

resorted to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration. However, within the deviant PCD (≥1) group, the same number (50.00%) of sex offenders resorted to intercourse and sodomy as to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration.

Table 8

Two-Step Cluster Analysis of Sexual Acts Committed During Sexual Assault

Sexual act	Cluster 1 $n = 35$	Cluster 2 $n = 17$	p	χ^2
Indecent request	0 (0.00)	9 (52.94)	.000[a]	22.41
Exhibitionism	0 (0.00)	6 (35.29)	.001[a]	13.96
Fondling	5 (14.29)	14 (82.35)	.000[b]	22.86
Masturbation of or by victim	0 (0.00)	5 (29.41)	.002[a]	11.39
Fellatio	7 (20.00)	3 (17.65)	1.000[a]	0.04
Forcing oral sex on victim	5 (14.29)	0 (0.00)	.159[a]	2.69
Attempted intercourse	0 (0.00)	5 (29.41)	.002[a]	11.39
Completed intercourse	33 (94.29)	8 (47.06)	.000[a]	15.30
Attempted sodomy	2 (5.71)	0 (0.00)	1.000[a]	1.01
Completed sodomy	8 (22.86)	0 (0.00)	.042[a]	4.59
Attempted digital penetration	1 (2.86)	0 (0.00)	1.000[a]	0.50
Digital penetration	2 (5.71)	5 (29.41)	.031[a]	5.52

Note. $N = 52$. Percentage equivalents for the corresponding cluster appear in parentheses next to activity frequencies.

[a]Fisher's exact test is reported.

[b]Pearson chi-square is reported.

Similarly, there was a significant, moderate size association between the three groups and two clusters, $\chi^2(2, N = 52) = 6.14$, $p = .046$, Cramer's $V = .34$. Precisely, significantly more sex offenders in the deviant PCD (≥3) group resorted to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration (71.43%) than to intercourse and sodomy (28.57%) as opposed to the non-deviant group where, conversely,

significantly more sex offenders resorted to intercourse and sodomy (76.47%) than to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration (23.53%). The non-deviant group and the deviant PCD (≥3) group also significantly differed from each other in their recourse to cluster 2 and cluster 1 sexual acts. Despite the overall association between group membership and cluster 1 and cluster 2 sexual acts, the adjusted residuals did not reach significance level for sex offenders in the deviant non-PCD (<3) group in their recourse to intercourse and sodomy (63.64%) as well as indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration (36.36%). The results suggest that sex offenders in the deviant non-PCD (<3) group did not differ significantly in their recourse to cluster 1 (63.64%) and cluster 2 (36.36%) sexual acts from the overall percentage of the sample resorting to cluster 1 (67.31%) and cluster 2 (32.69%) sexual acts.

Level of violence during sexual assault. Next, we examined whether the diagnostic groups differed in the level of violence used during sexual assault. For the whole sample, the total scores on violence ranged from 1.00 to 11.50 (M = 5.13, SD = 2.38). There was a statistically significant difference in the level of violence between the two groups (DSM-5, 2012), the non-deviant group resorting to a higher level of violence (M = 5.82, SD = 2.21) than the deviant PCD (≥1) group (M = 3.83, SD = 2.19), $t(50) = 3.10$, $p = .003$. The magnitude of the difference in the means (mean difference = 1.99) was large ($R^2 = .16$) (Cohen, 1988). In other words, the group membership explains approximately 16% of variance in the level of violence used during sexual assault. Similarly, a one-way ANOVA showed a significant difference between three groups of sex offenders (DSM-5, 2010) in the level of violence used during sexual assault, $F(2, 49) = 5.34$, $p = .008$. Post-hoc comparisons using Scheffé test indicated that the non-deviant group resorted to significantly more violence (M = 5.82, SD = 2.21) than did the deviant non-PCD (<3) group (M = 3.41, SD = 2.05). However, the deviant PCD (≥3) group (M = 4.50, SD = 2.40) did not differ significantly from either of the two groups. The observed difference between means was large ($R^2 = .18$) (Cohen, 1988), i.e., 18% of variance in the level of violence used during sexual assault is explained by the group membership.

Next, in order to examine the association of deviant sexual interests focused on coercion (suggesting presence of PCD) and overall violence, the relationship between RI and overall level of violence was examined. The test revealed a strong, negative and significant relationship between the two variables, ρ = -.489, n = 47, p < .001, suggesting that as RI increases, the level of overall violence decreases. There was also a moderate, positive and significant relationship between the overall level of sexual intrusiveness and overall level of violence, r = .29, N = 52, p = .034.

Offense violence. Next, we examined types of violent behaviors to see which were unique to PCD in order to ultimately enable us to identify preferential rapists while discriminating them from other types of sex offenders, such as sexual sadists. There was a significant and moderate association between the variable *use of weapons* and group membership (DSM-5, 2012), $\chi^2(1, N = 52) = 3.81$, p = .051, phi = .27. Precisely, significantly less sex offenders in the deviant PCD (≥1) group (33.33%) used weapons during the commission of sexual assault as opposed to sex offenders in the non-deviant group (61.76%). A moderate association was also found between the variable *hitting the victim* and group membership even though Fisher's exact test did not reach statistical significance, p = .08, phi = .29. Nevertheless, it must be noted that none of the sex offender in the deviant PCD (≥1) group (0.00%) hit the victim, whereas 20.59% of sex offenders in the non-deviant group did. For the remainder of the 10 variables, the results were non-significant. Furthermore, chi-square analysis did not reveal a significant association between three groups (DSM-5, 2010) and any of the 11 violent behaviors.

Classification of sex offenders based on violent behaviors. A two-step cluster analysis was conducted forcing the sample into two most different groups of sex offenders in terms of violent behaviors (see Table 9). Cluster A (n = 34) consisted mainly of *death threats, excessive force* and *use of weapons*. Furthermore, *confinement* was unique to cluster A even though the statistical significance level was not attained. Cluster B (n = 18) consisted mainly of *manipulation.* The variable *use of drugs*, although not having attained statistical significance level, was unique to cluster B. The silhouette measure of cohesion and separation indicated a satisfactory cluster quality.

Table 9

Two-Step Cluster Analysis of Violent Behaviors Committed During Sexual Assault Forced into Two Clusters

Violent behavior	Cluster A $n = 34$	Cluster B $n = 18$	p	χ^2
Insult	3 (8.82)	2 (11.11)	1.000[a]	0.07
Confinement	7 (20.59)	0 (0.00)	.081[a]	4.28
Trickery	3 (8.82)	1 (5.56)	1.000[a]	0.18
Manipulation	2 (5.88)	7 (38.89)	.005[a]	8.96
Threats	9 (26.47)	1 (5.56)	.136[a]	3.32
Death threats	18 (52.94)	0 (0.00)	.000[b]	14.57
Use of force	20 (58.82)	15 (83.33)	.073[b]	3.21
Hitting	5 (14.71)	2 (11.11)	1.000[a]	0.13
Use of drugs	0 (0.00)	1 (5.56)	.346[a]	1.93
Excessive force	13 (38.24)	2 (11.11)	.040[b]	4.22
Use of weapons	26 (76.47)	1 (5.56)	.000[b]	23.71

Note. $N = 52$. Percentage equivalents for the corresponding cluster appear in parentheses next to activity frequencies.

[a]Fisher's exact test is reported.

[b]Pearson chi-square value is reported.

When cluster A and cluster B groups of sex offenders were compared on age, number of victims, RI and overall levels of sexual intrusiveness and violence, no significant differences were found to the exception of the overall level of violence used, $t(50) = 5.78$, $p < .001$. Precisely, sex offender group characterised by death threats, excessive force and use of weapons resorted to a higher overall level of violence than sex offenders characterised by manipulation. The magnitude of the difference in the means (mean difference = 3.14) was very large ($R^2 = .40$) (Cohen, 1988).

Consequently, chi-square test of independence indicated no significant association between two groups (DSM-5, 2012) and clusters A and B, $\chi^2(1, N = 52) = 2.88$, $p = .09$, phi =

.24 (small to moderate effect size). Despite the non-significant results, the emergent trend suggests that equal numbers of sex offenders in the deviant PCD (≥1) group (50.00%) may resort to death threats, excessive force and use of weapons as to manipulation. However, more sex offenders from the deviant PCD (≥1) group (50.00%) than from the non-deviant group (26.47%) may resort to manipulation. Furthermore, more sex offenders in the non-deviant group may resort to death threats, excessive force and use of weapons (73.53%) than to manipulation (26.47%). Similarly, a moderate size association was observed between three groups (DSM-5, 2010) and clusters A and B, $\chi^2(2, N = 52) = 5.20$, $p = .074$, Cramer's $V = .32$ even though the significance level was not attained. The results suggest that the deviant non-PCD (<3) group might be associated more with the use of manipulation (63.64%) than death threats, excessive force and use of weapons (36.36%) and conversely, the non-deviant group might be associated more with the use of death threats, excessive force and use of weapons (73.53%) than with manipulation (26.47%). In the deviant PCD (≥3) group, 28.57% resorted to manipulation whereas 71.43% resorted to death threats, excessive force and use of weapons.

Finally, we examined whether the total number of victims inflated the observed results in the overall levels of sexual intrusiveness and violence. To do so, correlation analyses between these variables were conducted. Furthermore, the diagnostic groups were compared in terms of the total number of victims using t-tests and ANOVAs. There was a significant, positive and weak relationship between the overall level of sexual intrusiveness and the total number of victims, $\rho = .28$, $N = 52$, $p = .042$. However, there was no significant relationship between the overall level of violence and the total number of victims, $\rho = .05$, $N = 52$, $p = .709$. Furthermore, there was no statistically significant difference in the total number of victims between the non-deviant group ($M = 2.94$, $SD = 2.03$) and the deviant PCD (≥1) group ($M = 2.67$, $SD = 1.85$), $t(50) = .48$, $p = .635$ (DSM-5, 2012). The magnitude of the difference in the means (mean difference = 0.27) was very small ($R^2 = .004$) (Cohen, 1988). On the other hand, there was a significant difference between the three groups of sex offenders (DSM-5, 2010) in the total number of victims, $F(2, 49) = 6.83$, $p = .002$. Post-hoc comparisons using Scheffé test indicated that the deviant PCD (≥3) group ($M = 4.57$, $SD = 1.51$) had significantly more victims than did the deviant non-PCD (<3) group ($M = 1.45$, $SD = .52$). However, the non-

deviant group (M = 2.94, SD = 2.03) did not differ significantly from either of the two groups. The observed difference between means was large (R^2 = .22) (Cohen, 1988).

Discussion

Given the lack of empirical research on PCD, and the challenges associated with accurate diagnosis of PCD, we investigated offense characteristics among a sample of sex offenders in an attempt to identify behavioral markers that can help discern rapists with PCD from non-preferential rapists. The diagnosis of PCD was made using two sets of PCD criteria that were proposed for inclusion in the DSM-5. An implicit objective was to examine the ability of the diagnostic manual to formulate a meaningful diagnostic group with associated, distinct offense conduct characteristics. In summary, our findings showed that rapists with PCD are more sexually intrusive and resort to less violence overall than sex offenders without such a diagnosis, confirming our initial hypotheses. In line with our hypothesis, exhibitionism and fondling were associated with PCD, but contrary to our prediction, intercourse was not. Moreover, rapists with PCD were characterised more by indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration rather than by intercourse and sodomy. In terms of violent behaviors, rapists with PCD resorted less to the use of weapons, seemed not to hit their victims, and were likely characterised more by manipulation rather than by the use of death threats, excessive force and weapons. A more thorough discussion follows.

Level of Sexual Intrusiveness and Types of Sexual Acts in the Context of Sexual Assault

First, we examined whether groups of sex offenders with PCD, using DSM-5's proposed criteria for the diagnosis, differed from other groups of sex offenders in terms of overall levels of sexual intrusiveness. Our results suggest that, during sexual assault, rapists with PCD tend to be more sexually intrusive than non-preferential rapists, but only when the DSM-5's 2010 proposed criteria for PCD are used as opposed to 2012 criteria. Second, we examined the types of sexual acts committed during sexual assault in order to identify the behavioral markers of PCD. The results showed that, when looking at two groups of sex offenders (DSM-5, 2012), significantly more preferential rapists engaged in fondling (55.56%) and exhibitionism (27.77%) as opposed to sex offenders without such a diagnosis (26.47% and

2.94%, respectively). Similar results were obtained when looking at three groups of sex offenders (DSM-5, 2010) for the variables fondling (100.00%) and exhibitionism (57.14%). Our results suggest that, although sex offenders with PCD (DSM-5, 2010) tend to be overall more sexually intrusive than non-preferential rapists during sexual assault, the types of sexual acts that preferential rapists (using both, DSM-5 2010 and 2012 criteria) resort to can be, when taken individually, described as qualitatively "less intrusive". In other words, a greater sexual intrusiveness indicates the recourse to a greater variety of sexual acts during sexual assaults. For sex offenders with PCD, this greater variety reflects the recourse to less intrusive sexual acts such as fondling as opposed to anal and vaginal intercourse, considered to be more invasive.

On one hand, when examining diagnostic groups on the total number of victims, the only significant difference was found between the PCD and the deviant non-PCD groups (DSM-5, 2010). These results are probably best understood as a by-product of DSM-5's proposed criteria for PCD. Precisely, by setting the minimum number of victims at three, the total number of victims in the PCD group is artificially inflated. On the other hand, we observed a significant relationship between the total number of victims and the level of sexual intrusiveness. This leads us to believe that the significantly higher level of sexual intrusiveness in the PCD group is, at least in part, attributed to the fact that (1) the total number of victims was not completely controlled for in the present study and/or (2) the DSM-5 criteria inflated number of victims in the PCD group. However, the number of victims cannot account for the significant difference found in the level of sexual intrusiveness between the PCD group and the non-deviant group (DSM-5, 2010) given that the difference between these two groups on the total number of victims was not significant. This leads us to believe that the total number of victims is not the sole explanation for the observed group differences in the overall level of sexual intrusiveness and may instead reflect an inherent characteristic of sex offenders with a PCD.

Sex Offender Typology Based on Sexual Acts

Third, we classified sex offenders into groups based on offense sexual conduct. This led to the identification of two groups of sex offenders, or clusters 1 and 2. The first group is

characterised by completed intercourse and completed sodomy and, potentially, forced cunnilingus, attempted sodomy and attempted digital penetration. The second group is characterized by indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration. The two groups did not differ from each other in a significant way in terms of total number of victims, RI, age and levels of sexual intrusiveness and violence. However, the examination of the association between the two groups (DSM-5, 2012) and clusters 1 and 2 revealed that significantly more preferential rapists (50.00%) resorted to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration than did non-preferential rapists (23.52%) who, in turn, resorted significantly more to intercourse and sodomy (76.47%) than to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration (23.52%). Similar results were observed when looking at three groups (DSM-5, 2010), where significantly more sex offenders with PCD resorted to indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration (71.43%) as opposed to intercourse and sodomy (28.57%). Overall, these results suggest that preferential rapists might have a "generalist" profile, resorting to a mix of sexual acts that range from fondling to sodomy. However, when compared to non-preferential rapists, sex offenders with PCD seem to resort less to qualitatively intrusive sexual acts in spite of the high levels of overall sexual intrusiveness observed in this group of rapists. This difference, i.e., a greater recourse to less intrusive sexual acts among preferential rapists, is more striking when the 2010 criteria set for PCD is used.

The findings have some implications for the courtship disorder hypothesis proposed by Freund and Kolarsky (1965). On one hand, present results seem to suggest that within the context of sexual assault, multiple paraphilic-like activities (e.g., fondling, exhibitionism) co-occur, particularly when the perpetrator presents a deviant sexual interest profile (PCD in our case). This finding goes in line with the high levels of comorbidity reported in the literature between different paraphilias, especially between rape and paraphilic activities characteristic of courtship disorder (Abel et al., 1988; Freund, 1990; Freund et al., 1997). Freund and Seto (1998) have proposed that the presence of another paraphilia, especially exhibitionism, may be a useful behavioral marker for preferential rape. Our findings seem to support their findings,

lending further credence to the courtship disorder hypothesis (Freund & Kolarsky, 1965). Moreover, present results suggest that an emphasis that the perpetrator puts on fondling the victim (somewhat similar in nature to frotteurism) in the context of sexual assault may, in addition to exhibitionism, serve as a behavioral marker for PCD. However, replication of the current findings is necessary in order to draw firm conclusions. On the other hand, given that we are looking at sex offenders that are said to be "preferential types", and in line with courtship disorder hypothesis, it was expected that, in addition to finding and exhibitionism, paraphilic rapists would resort to more intrusive sexual acts, particularly to intercourse. However, results suggest that preferential rapists are not exclusively motivated by coercive sex (i.e., involving penetration), and resort to a number of sexual acts that are coercive in nature. This finding can also be understood from the perspective whereby vaginal intercourse is not a sexual act "unique" to PCD and can be found in the repertoire of different subtypes of rapists, paraphilic or not.

The observed results also raise the question of whether men with PCD are more disinterested in sex, specifically in intercourse and sodomy. However, we observed a negative relationship between deviant sexual interests in coercion (as measured by PPG) and overall level of violence, as well as a positive relationship between overall level violence and sexual intrusiveness. These results point to the possibility that it is not as much a lack of interest in or a lack of preference for intercourse but rather unwillingness to subject the non-consenting victim to unnecessary, additional harm and suffering that prevents him from resorting to more intrusive sexual acts, such as intercourse and sodomy, the completion of which would require the use of greater amounts of force/violence.

Level of Violence and Types of Violent Acts in the Context of Sexual Assault

In regards to violent behaviors, we first examined in which ways the diagnostic groups of sex offenders differed in the level of violence used during the commission of sexual assault. Our results show that when looking at two groups (DSM-5, 2012), preferential rapists resort to a significantly lesser amount of overall violence during sexual assault than do sex offenders without a PCD diagnosis. The concern regarding the fact that the number of victims was only partly controlled for and may influence the observed difference in the overall levels of

violence between the two groups does not seem to be warranted as the total number of victims and the level of violence were not significantly correlated.

Subsequently, in regards to types of violent behaviors, the results revealed that almost twice as many non-preferential rapists (61.76%) used weapons during the commission of sexual assault than did preferential rapists (33.33%), a difference that was also statistically significant (DSM-5, 2012). Although the results were not statistically significant, at 20.59%, hitting the victim was found to be substantially associated with non-preferential sex offenders, whereas no one in preferential group of rapists hit the victim. Similarly, when looking at the three groups (DSM-5, 2010), non-preferential rapists resort to a significantly greater amount of violence than do rapists with a deviant RI profile and 1-2 victims. However, neither of the two groups differ significantly from preferential rapists in the amount of violence they employ. Despite substantial associations found between diagnostic groups and specific types of violent behaviors, most of which were also found to be relevant to two diagnostic subgroups (DSM-5, 2012), statistical significance levels were not reached.

Sex Offender Typology Based on Violent Behaviors

Based on the types of violent acts committed in the context of sexual assault, sex offenders were classified into two most distinct groups, clusters A and B. The former group was characterized by death threats, excessive force, use of weapons and potentially confinement, whereas the latter group was characterized by manipulation and potentially use of drugs. The two groups differed significantly only in terms of the overall level of violence employed in the context of rape but not in terms of the total number of victims, RI, age or level of sexual intrusiveness. More specifically, the group characterized by death threats, excessive force and use of weapons resorted to significantly higher levels of violence overall than the group characterised by manipulation. However, none of the two groups were significantly associated with PCD regardless of the set of diagnostic criteria used (DSM-5, 2010 and 2012).

Due to the exploratory nature of the question, and given the moderate size associations that were observed, we decided to report the trends that our results suggested. More precisely, in the 2012 classification system, non-preferential sex offenders (non-deviant group) seem to resort more to death threats, excessive force and use of weapons than to manipulation.

However, although preferential rapists (deviant PCD (≥1) group) seem to resort more to manipulation than do non-preferential sex offenders, an equal number of preferential sex offenders seem to resort to each type of violent behaviors. In the 2010 classification system, the results for the non-preferential group are identical to the results observed in the 2012 classification system for this group. For the deviant non-PCD group (<3), the trend seems to suggest a greater recourse to manipulation than to the recourse to death threats, excessive force and use of weapons. However, for the preferential rapists (deviant PCD (≥3)), the opposite trend is observed. Precisely, more preferential rapists seem to resort to death threats, excessive force and use of weapons than to manipulation, a pattern that is similar to the one observed among non-preferential sex offenders. As such, overall, an examination of the diagnostic groups in association with clusters A and B suggests that preferential rapists may show less preference in their use of violence, resorting to acts ranging from manipulation to excessive force. However, due to the non-significant results, the findings reflect trends. For more conclusive results, further research is necessary.

Overall, the results of our study seem to support the conceptualisation of PCD according to which preferential rapists do not resort to violence excessively and may use it only in the amounts necessary to bring the sexual aggression to completion. However, the fact that preferential rapists were, overall, less violent, does not denote that they did not resort to violence. In fact, a closer inspection shows that some sex offenders used excessive violence, even though this may not have been the defining characteristic of this subgroup. Moreover, similar to sexual activities, the group of sex offenders with PCD seems to resort to a mixture of violent behaviors, ranging from manipulation to excessive force even though, overall, the preferential group was less violent as opposed to the non-preferential group.

Furthermore, some contradictory findings reported in the literature (e.g., greater association between facial injury and PCD rather than SSD, Richards & Jackson, 2011; greater association between beating and torture with non-sadistic rather than sadistic rapists, Marshall et al., 2002) render it more difficult to draw firm conclusions about PCD and associated violent behaviors. It is possible that the PCD group in Richards and Jackson's (2011) study was particularly extreme given that they were civilly committed under SVP laws. What the present findings do illustrate is that sexuality and violence are fused during sexual assault

(e.g., observed correlation between the overall levels of sexual intrusiveness and violence). Therefore, rape should be studied by taking the violent behaviors and the coercive acts into account. Examining the level of victim resistance may further help us understand the interplay between sexuality, violence and victim resistance and offer potential insights into the psyche of the perpetrator and the driving force behind sexual offending. For instance, if in the absence of resistance on behalf of the victim there is a substantial amount of violence used, this may be a better indication of the function of violence (e.g., expressive vs. instrumental) rather than examining in isolation the absence/presence, extent or types of violence that the sex offender engaged in. Overall, there is a need to replicate current findings to better understand violent behaviors, the role they may play in sexual arousal and their association and specificity with different types of sex offenders, such as preferential rapists and sexual sadists.

Interestingly, many of the sexual and violent tendencies and features observed in the present study within the non-preferential group of sex offenders, such as victim confinement, anal and vaginal rape, hitting the victim, forcing oral sex on the victim and the use of weapons, have been commonly reported in association with sexual sadism (Barbaree et al., 1994; Dietz et al., 1990; Gratzer & Bradford, 1995; Marshall & Kennedy, 2003). The present results raise the possibility that rapists with a non-deviant/non-preferential profile in our sample may in fact be part of a sadistic subtype. However, this group may be less severe than "typical", more advanced sadists with explicit sexual and violent behaviors (e.g., torture, insertion of foreign objects into the victim's orifices and reported sexual arousal from victim's suffering) that were excluded from the present study as per DSM-5 proposed criteria for PCD. If the non-deviant/non-preferential sex offenders in our sample are in fact more accurately part of the sadistic subtype (i.e., "muted" sadists; Knight, 1999), it may partly explain the high occurrence (65.38%) of non-deviant rape indices observed in our sample. More specifically, it is possible that the deviant sadistic sexual interests in non-deviant/non-preferential groups were not detected by the stimuli that were used during phallometric assessment because they were targeting deviant sexual interests focused on sexual coercion rather than on the suffering and humiliation of the victim (sadistic sexual interests).

If non-preferential rapists in the present sample are indeed characterized by a less severe form of sexual sadism, then, given the shared characteristics of sexual and violent acts found

across diagnostic groups (to the exception of hitting the victim, which might be unique to non-preferential group), the results suggest that PCD may be on a continuum with SSD rather than a distinct entity. The dimensional nature of PCD/SSD has been proposed in the literature (e.g., Doren, 2002; Knight, 2010; Knight, Sims-Knight, & Guay, 2013). Should future research provide additional data supporting the continuity between the two psychological constructs, it would be pertinent for the DSM criteria to reflect this. For instance, a paraphilic disorder for rapists could be proposed with an added specifier to indicate whether the focus of deviant sexual interests is better captured by "sadistic features" or "coercive features" along with their associated behavioral markers. This would acknowledge the fact that a portion of sexual offenses are paraphilic in nature albeit not sadistic.

In light of Knight's (1999) typology for sexual offending, it makes sense to consider an alternative possibility, specifically, that alongside "muted" sadists our non-deviant/non-preferential sample of sex offenders includes vindictive, opportunistic, and pervasively angry rapist subtypes. Vindictive and pervasively angry rapist subtypes are known to use a great deal of violence and cause a great amount of victim damage (e.g., Knight, 1999), potentially more so than do "muted" *sadistic* subtypes (Barbaree et al., 1994). This raises some serious concerns in regards to our ability to satisfactorily distinguish different subtypes of rapists on the basis of their overt violent behavior, especially in the absence of other hard evidence for the presence of deviant sexual fantasies. This, once again, highlights the necessity of combining different sources of information to support the diagnosis of PCD.

General Conclusion

Overall, our results suggest that preferential rapists are more sexually intrusive than non-preferential rapists. They seem to present a "generalist" profile, resorting to a number of diverse sexual acts, ranging from fondling to penetration. Furthermore, despite the high levels of overall sexual intrusiveness found among the preferential rapists, as a group, they seem to resort more to less intrusive sexual acts, such as fondling and exhibitionism, than do non-preferential rapists who, in turn, seem to specialize more in sexual acts that may be considered as qualitatively more intrusive/invasive (sodomy, intercourse). In terms of violence, preferential sex offenders seem to be less violent than non-preferential rapists, although the

difference is less clear-cut when using the 2010 classification system. In addition to an overall more violent profile, the use of weapons and possibly hitting the victim may be associated more with non-preferential subgroup of sex offenders. Overall, our findings suggest there is utility in examining both, sexual and violent acts committed in the context of sexual assault during the assessment process and that there might be some value in using PCD criteria that were proposed by paraphilia Workgroup for inclusion in the DSM-5 insofar that we are able to identify some characteristics specific to PCD group using either of the two sets of criteria for PCD. Each criteria set (American Psychiatric Association, 2010, 2012) seems to have its strengths and weaknesses depending on whether sexual acts or violent behaviors are being examined.

The present study has certain caveats. For instance, our sample is small, which limits statistical analyses and their power as well as the generalization of the present results. Furthermore, the absence of information on the specific subtypes of sex offenders that may constitute our control group – such as opportunistic, vindictive, pervasively angry, and "muted" sadist subtypes – limits our ability to draw conclusions as to how the sex offenders in the PCD group compare to any of these subtypes of sex offenders taken individually. Finally, combining all new occurrences of sexual acts and violent behaviors across victims into total scores of sexual intrusiveness and violence does not allow us to state whether each sexual act and violent behavior was enacted against every victim or only against some, nor how frequently the sex offender engaged in each sexual and violent behavior. Such information could give us insights regarding the salient role that certain sexual acts or coercive behaviors play for the perpetrator during sexual assault.

Given these limitations and highly controversial nature of PCD, it would be premature to conclude that DSM should include PCD solely on the basis of our findings, ending a debate that spans over three decades. In and of itself, rape does not reflect a preferential/paraphilic interest in coercive sexuality; it is oftentimes symptomatic of general criminality and antisocial tendencies (Frances & First, 2011; Knight, 1999; Lalumière et al., 2005). The precise nature of PCD, such as sexual interest in or indifference to coercive sexuality, dimensional vs. categorical nature, and correlates of PCD still need to be elucidated. The scarcity of well validated empirical studies on PCD highlights the need for continued research

using larger samples and comparison groups, such as sex offenders with SSD, for more conclusive results. We hope that our study provides some avenues for future research and that the exclusion of PCD from the diagnostic manual will not hinder research into this challenging subject matter.

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CHAPTER V – DISCUSSION

Overview of the Problem and Research Objectives

PCD has a long and controversial history dating back to the early 80s. Extant literature on PCD suggests that its continued absence from the DSM is attributed in large part to the scarcity of information on PCD (e.g., prevalence rates) and difficulty that exists in accurately ascertaining its presence in a known sex offender amid a vast pool of sex offenders whose underlying motives for their sexual crimes vary greatly. To help with the assessment of PCD, a number of proposals have been brought forth. First, during the revision process of the DSM-5, it was suggested that the minimum number of victims in the diagnostic manual be set at either 3 (2010) or 1 (2012) (American Psychiatric Association, 2010, 2012). However, these cut-offs were not empirically based (American Psychiatric Association, 2011; First, 2010; Wakefield, 2011; Wollert, 2011). Despite this fact, the virtually automatic and exclusive reliance on the number of victims to infer the presence of a putative PCD diagnosis is commonly made in clinical and legal setting alike. Such practice can lead to the problem of misdiagnoses with associated social and legal consequences, such as lifelong confinement to a prison-like facility. Second, given that sex offenders are not overtly forthcoming about the underlying sexual fantasies and urges that drive their sexual offending due to potentially lifelong imprisonment, phallometric assessments are used to determine the presence and the nature of underlying deviant sexual interests. Although PPG is considered to be the gold standard for assessment of deviant sexual interests, it can at times lead to uninterpretable results. At other times, the phallometric data is unavailable altogether for a number of reasons, such as the refusal to undergo the procedure. In any case, regardless of the results obtained during phallometric assessment, combining physiological data with other sources of evidence is necessary. This will better reflect the multifaceted nature of sexual arousal and help attain a greater degree of validity and reliability in the diagnostic process. To that end, the reliance on objective or behavioral markers associated with rape-proneness is of particular interest to help identify sex offenders with PCD independently of their willingness to cooperate.

Due to the lack of research in the literature on clinically relevant data on PCD, including behavioral markers, studies in this area are needed. As such, in the present thesis, we set out to investigate a number of variables – minimum number of victims, types of sexual acts and violent behaviors committed in the context of sexual assault – in order to identify objective

markers associated with rape-proneness to aid in the diagnostic process of PCD. The overarching objective was to assess the utility of and potential problems associated with DSM criteria, to better our understanding of PCD, and to eventually offer insights into new avenues of treatment for sex-offenders afflicted with PCD. The thesis is composed of three empirical articles which address the abovementioned objectives.

Main Results

The first article, which is a commentary, contains part of the key results emanating from our research project. In it, we examined the victim count hypothesis as well as behavioral markers of PCD with a focus on sexual acts committed in the context of sexual assault. These results, alongside other data not included in the commentary, are reprised in the second and third articles and elaborated therein. Therefore, we will proceed by discussing the results reported in the second and third articles directly in order to provide a more in depth account of the results and to avoid redundancy.

In the first study (second article), we first assessed what percentage of men convicted of sexually assaulting adult women met the diagnosis of PCD using 2010 and 2012 sets of PCD criteria proposed for inclusion in the DSM-5. The main difference between the two sets of criteria was the minimum number of victims requirement in the Criterion B of the DSM-5 (3 in 2010 and 1 in 2012). Based on the 2010 and 2012 sets of PCD criteria, three and two diagnostic groups were created, respectively. The results suggest that the rates of PCD among a sample of sex offenders released in the community range from 14.89% to 38.30% based on 2010 and 2012 PCD criteria, respectively. The present results provide valuable data on the observed frequencies of PCD, suggesting that the rates of PCD may be higher than what the extant literature usually alludes to (e.g., Frances, 2011; Thornton, 2010). Nevertheless, it must be noted that the minimum number of victims used to diagnose PCD has an important impact on the observed frequencies, potentially inaccurately inflating the prevalence rates (e.g., a 23.40% increase when a minimum 1 victim is used as opposed to a minimum of 3 victims).

Second, we assessed whether the reliance on number of victims (≥1 or ≥3; Criterion B) offers a valid means of assessing PCD. The results suggest that there is no association between number of victims and PCD. Therefore, the victim count hypothesis, or reliance on the number

of victims as a PCD criterion, was not supported. As such, the present results provide some empirical support to the critiques whereby the common practice of relying on the number of victims is judged as being arbitrary (e.g., First, 2010; Wakefield, 2011; Wollert, 2011). In the same line, when the relationship between number of victims and deviant sexual interests as measured by RI was examined, no significant association was found. Similarly, there was no ideal cut-point for RI that permitted to discriminate, within the PCD group (2012), rapists with deviant sexual interests who had three victims or more from rapists who had less than three victims. Overall, these results suggest that there is no relationship between number of victims and sexually deviant interests (in coercion), at least as measured by PPG. As such, our results show that the total number of victims itself may not be a valid means by which to judge the presence or absence of deviant sexual interests in coercive sex or the presence of PCD diagnosis. This is consistent with the data that show that rape can be driven by diverse, non-sexual motives (Knight, 1999) which, similar to sexual motives, may lead to multiple victimizations (Wakefield, 2011).

Third, at 10.64%, the overall rate of sexual recidivism in the present sample was comparable to the rates reported in the literature (13.4%, Hanson & Bussière, 1998; 14.1%, Harris & Hanson, 2004). Among the variables that were investigated in relation to their ability to predict sexual recidivism – such as RI, number of victims, scores on Static-99, Stable-2007 and combined measures – only RI reliably distinguished between sex offenders who sexually recidivated from those who did not. On one hand, in line with the available literature, present results confirm the predictive validity of deviant sexual interests as measured by PPG (e.g., Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2004). On the other hand, number of victims does not seem to have a predictive value for sexual recidivism. Once again, this may further support the idea that the reliance on number of victims is arbitrary and should not be used as a diagnostic criterion, at least not in isolation without other evidence supporting the presence of deviant sexual interests. Furthermore, in terms of the RI data, our results are in line with the general body of literature which shows that, as a group, sex offenders who assault adult women show a roughly similar plethysmographic response (i.e., little discrimination) between consenting and non-consenting stimuli (e.g., Lalumière et al., 2003). This pattern of apparent indifference between coercive and consenting sexual material may, at least in part, be

attributed to the fact that sex offender samples are heterogeneous (i.e., samples include rapists whose sexual crimes are not motivated by deviant sexual interests).

The second study (third article) set as its objective to evaluate the behavioral markers of PCD. More precisely, we investigated whether convicted sex offenders who were released in the community and met a diagnosis of PCD could be reliably distinguished from sex offenders without such a diagnosis on the basis of offense conduct characteristics. Using two sets of PCD criteria proposed for inclusion in the DSM-5 in 2010 and 2012, three and two diagnostic groups were created, respectively, each including a PCD subgroup. First, we examined whether the diagnostic groups differed in the overall level of sexual intrusiveness based on sexual acts. The results suggested that sex offenders with PCD were more sexually intrusive overall than sex offenders without such a diagnosis but only when the three groups were being compared (2010 criteria). However, in spite of the high levels of overall sexual intrusiveness found among the preferential rapists, as a group, they seem to resort more to less intrusive types of sexual acts, such as fondling and exhibitionism, than do non-preferential rapists. Thus, the present findings add to the available body of literature on the relation between preferential rape and other sexual behaviors, especially exhibitionism (Freund & Seto, 1998; Gebhard, Gagnon, Pomeroy, & Christenson, 1965; Simon, 2000; Stermacc & Hall, 1989). Furthermore, our results suggest that in addition to exhibitionism, fondling may also serve as a behavioral marker for PCD.

Second, when we classified sex offenders into meaningful groups based on their sexual acts, two groups emerged, where cluster 1 was characterized by intercourse and sodomy and cluster 2 was characterized by indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration. The present results show that overall, the group of preferential rapists resorted significantly more to a host of sexual acts (indecent request, exhibitionism, fondling, masturbation, attempted intercourse and digital penetration) as opposed to non-preferential group of sex offenders who, in turn, resorted more to intercourse and sodomy. Although a greater disinterest in sex was considered as a possible explanation of the results obtained within the group of preferential rapists, it seems unlikely. Rather, given the observed negative relationship between RI and violence, as well as a positive relationship between sexual intrusiveness and violence, the results suggest that the unwillingness to subject

the victim to additional violence, which would be required to achieve completed intercourse and/or sodomy, is a more plausible explanation. Overall, our findings suggest that preferential rapists resort to a diversity of sexual acts, ranging from fondling to intercourse; in other words, PCD group seems to present a "generalist" profile (i.e., "all over the place", suggesting a highly sexual character to their sexual assaults overall) whereas non-preferential rapists seem to "specialize" more in sexual acts that may be considered as qualitatively more intrusive, such as anal and vaginal intercourse. Despite the fact that we obtained two groups of sex offenders using a classification system based on their sexual acts, other than their association with diagnostic groups, there were no characteristics unique to the groups in terms of age, number of victims, RI and levels of overall sexual intrusiveness or level of violence. This may serve as a further testimony to the fact that, although there is a diversity in their motives to sexually offend, rapists share a troubling apparent similarity which makes, by this very scarcity of unique markers, identification of those with an underlying paraphilic interest in rape that much arduous.

Third, when we examined whether the diagnostic groups differed in terms of the overall level of violence employed, the present results suggest that preferential sex offenders are less violent than non-preferential rapists; however, in DSM-5's 2010 classification system this difference is less clear-cut. When individual violent behaviors were examined, in addition to an overall more violent profile, the use of weapons and, potentially, hitting the victim, was found to be associated more with non-preferential subgroup of sex offenders than with preferential rapists. Furthermore, none of the preferential rapist in our sample hit their victims (2012 criteria). These results suggest that preferential rapists use less violence than non-preferential rapists. Moreover, when they do, it may be instrumental in nature. In other words, preferential rapists may not seek to induce unnecessary terror in the victim (e.g., by implicit threat of death or serious injury that underlies the use of weapons) or cause bodily injury (e.g., by resorting to physical violence such as hitting the victim).

Next, we forced the sample into two classes of sex offenders, clusters A and B, based on the violent behaviors committed in the context of sexual assault. Cluster A consisted of death threats, excessive force, use of weapons and potentially confinement, whereas cluster B consisted of manipulation and potentially use of drugs. When we examined the association of

the two clusters with the diagnostic groups, the results were all statistically non-significant. However, they suggest that preferential rapists may resort more to manipulation than non-preferential rapists. In turn, the latter group may resort more to death threats, excessive force, and use of weapons than to manipulation. However, overall, the data suggests that the group of preferential rapists may equally resort to death threats, excessive force and use of weapons as well as to manipulation. Finally, when the two classes of sex offenders were compared on the variables of interest (age, number of victims, RI and levels of overall sexual intrusiveness and level of violence), the only distinguishing characteristic was the overall level of violence employed. More specifically, the group resorting to death threats, excessive force and use of weapons (cluster A) used significantly higher levels of violence overall than the group characterised by manipulation (cluster B). Overall, the present results suggest that preferential rapists, as a group, are less violent. Moreover, they seem to be versatile in their use of violent behaviors which tend to be qualitatively less severe than the violent behaviors perpetrated by non-preferential rapists (e.g., death threats or use of weapons vs. manipulation), similar to a pattern observed in terms of sexual acts. Due to the non-significant results, however, more research is required.

Theoretical Implications

Even though the present study was mainly designed to uncover behavioral markers associated with rape-proneness, the findings that emanate from it also have theoretical relevance. First, the association between RI and sexual recidivism that we observed supports the role of deviant sexual interests in sexual offending. The role of deviant sexual interests in sexual offending is well documented in the literature (e.g., Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2004). Nevertheless, deviant sexual arousal is one variable among many to play a role in the complex set of factors that lead to sexual offending, which is well reflected in the multifactorial theories of sexual offending (e.g., integrated theory of sexual offending, Ward & Beech, 2006; quadripartite model, Hall & Hirschman, 1991). The fact that sexual offending is multiply determined, and that deviant sexual interests are only a part of the equation, is further supported by the present results which indicate that deviant sexual interests explain only a portion of sexual recidivism, or approximately 13.0% to 29.1%. Overall, our results favor multifactorial theories which take into consideration a host of variables, such as

personality and neurological dispositions, and their complex interplay, to offer a more comprehensive account of sexual offending process (e.g., integrated theory of sexual offending, ITSO; Ward & Beech, 2006).

Second, to the extent that phallometric assessment procedures are able to accurately detect *all* individuals with deviant sexual interests when they are indeed present (sensitivity), our results show that not all rapists' sexual offending is due to underlying deviant sexual interests in coercion. This was in part supported by our findings whereby a substantial proportion (up to 65.38%) of the sample with a non-deviant phallometric profile (i.e., suggesting absence of deviant sexual interest in coercion) had one or more victims (up to 13). These results further support the findings that rapists represent a heterogeneous population and that, as such, their motives to sexually offend vary (e.g., Lalumière, Harris, Quinsey, & Rice, 2005; Prentky & Knight, 1991). Of course, we cannot rule out the possibility that the non-deviant profile of arousal observed in our sample reflects a voluntary control of penile response by participants rather than a true absence of deviant sexual interests. As such, while the present study overall supports the role of deviant sexual interests in sexual offending, it also highlights the necessity to assess and take other variables into consideration whether it is to better understand the sexual offender and his sexual offending, to design a comprehensive treatment plan or to measure treatment success.

Finally, the observed associations found between the group of preferential sex offenders and two sexual activities, exhibitionism and fondling, lends further credence to the courtship disorder hypothesis proposed by Freund and Kolarsky (1965). The present results suggest that PCD may indeed share an underlying disruption in the normal courtship process with other paraphilic activities, specifically exhibitionism and fondling. Our findings indicate that exhibitionism and fondling within the context of sexual offending may serve as behavioral markers of PCD. This is in line with the studies commonly reporting associations between rape and paraphilic activities characteristic of courtship disorder (e.g., Abel, Becker, Cunningham-Rathner, Mittelman & Rouleau, 1988; Freund, 1990; Freund, Seto, & Kuban, 1997). While Freund and Kolarsky (1965) have suggested that some phases of the courtship process are entirely omitted or only minimally expressed with an emphasis on orgasmic attainment, our results suggest that preferential rapists may, in fact, present an intensification

of more than one of the courtship phases during rape (such as fondling *and* exhibitionism) giving the sexual assault a highly intrusive, sexual character. The omnipresence of a number of sexual activities during rape might provide cues into the underlying paraphilic motives of the offender, independently of the presence of ejaculation. However, further investigation into this hypothesis is necessary.

Clinical Implications

The present study examined a number of variables that are considered closely during the assessment and treatment planning of sex offenders, such as number of victims, RI, actuarial risk assessment tools (Static-99 and Stable-2007) and offense conduct information (sexual acts and violent behaviors). We examined the validity of relying on the number of victims to evoke a diagnosis of PCD while, at the same time, using the DSM's proposed criteria for PCD. To the best of our knowledge, there are no published studies that have directly examined victim count hypothesis using the DSM framework.

First, our results offer evidence that the number of victims (Criterion B) is not a valid criterion to diagnose PCD in men who sexually offend against adult women. The study supports the fears voiced by many as to the arbitrary nature of using the victim count for diagnostic purposes (First, 2010; Wakefield, 2011; Wollert, 2011). Given the present findings, it may be indicated to exclude victim number specifications from diagnostic criteria if the PCD is proposed for inclusion in the DSM in the future. Number of victims should be irrelevant for the diagnosis of PCD provided that, in the absence of victims, the person experiences clinical distress or disruption in functioning. In sum, evaluators should be careful not to conclude on the basis of a mere presence of victims that there is an underlying paraphilic disorder driving sexual offending. Men who offend against adult women represent a heterogeneous population (Knight, 1999) and even non-sexual rapists may have a victim, one or multiple. Unfortunately, our results also show clearly that when dealing with non-cooperative individuals, using one victim as a PCD criterion can substantially increase the number of false positives, inflating the prevalence rates of PCD. Given the abovementioned invalidity of relying on the number of victims, on one hand, and the potential of high number of misdiagnoses when 1 victim is used, combining three victims with pertinent behavioral

markers for (e.g., exhibitionism, fondling) and against PCD (e.g., hitting the victim, using weapons), may help formulate conservative diagnostic criteria and limit the number of false positive diagnoses. Yet, setting the victim count threshold at three will, unfortunately, not solve the problem of false negatives nor will it protect individuals involved in sexual predator commitment proceedings (Wakefield, 2011). In conclusion, regardless of number of victims, the evidence for deviant interests in coercive sexuality (Criterion A) must be documented thoroughly based on various sources of information, including PPG, if we are to speak of PCD.

Second, the present results highlight the value of assessing the presence of deviant sexual interests (Criterion A) as demonstrated by the predictive value of RI in sexual recidivism and targeting them in treatment. Furthermore, the deviant sexual interests are at the core of paraphilic disorders. As such, if one is to distinguish a rapist who is a "simple criminal" from a preferential rapist, it must be determined whether deviant sexual interests are what drive the rape behavior. In this line of thought, improving the tools currently in use for the assessment of deviant sexual interests, such as PPG and audio/visual stimuli, is a relevant avenue of research. When the evidence for deviant sexual interests is lacking, a rapist should be treated as a criminal without the associated stigma of mental illness. This, however, is not to say that the perpetrator cannot benefit from psychological interventions adapted to his needs. The problem of misdiagnosis is further aggravated with the use of "or behaviors" specifier in Criterion A. Precisely, when using "or behaviors" specifier, one relies heavily on the number of victims – an arbitrary criterion for PCD as indicated by present results – to satisfy both, the Criterion A (behavior) and the Criterion B (presence of a victim). This makes the diagnosis of PCD possible while rendering the presence or assessment of deviant sexual interests in coercive sexuality obsolete. It would thus be advisable to remove "or behaviors" specifier from Criterion A. The specifier may be retained only if it explicitly refers to behaviors other than the presence/number of victims and which have been shown to be intimately related to deviant sexual interests (e.g., presence of behavioral markers such as exhibitionism).

Last, the present study highlights the pertinence of examining the presence of paraphilic sexual activities within the context of sexual assault, such as exhibitionism and fondling. The presence of such offense conduct may inform us about the sexual character of the sexual

assault and help us distinguish a rapist who is preferential in nature from a rapist who is a "simple criminal". Nevertheless, it must be noted that although the study shows a specific pattern of association of certain types of sexual activities and violent behaviors with preferential rapists, they are in fact shared with other diagnostic groups of sex offenders without PCD diagnosis. In other words, there are no unique features associated with preferential rapists with the possible exception of hitting the victim. As such, emitting a diagnosis of PCD solely on the basis of such behavioral markers would be premature.

Overall, the present study highlights the importance of taking into consideration a combination of factors – such as RI, self-report data, behavioral makers of PCD (sexual acts and violent behaviors) – when assessing the motives underlying sexual offending. Taking into consideration a combination of variables would reflect more accurately the complexity of sexual offending and the diverse manifestations of sexual arousal. Our study also highlights the importance of assessing and targeting other paraphilic activities in treatment, in addition to rape, given the high comorbidity and the possibility of a common underlying mechanism among courtship disorders. Indirectly, our results underscore the value of continued collaboration with professionals from various fields, such as police officers, to obtain access to crime scene information. Such collaboration with collateral sources may help go beyond the data available in the laboratory or clinical setting alone and thereby help attain a greater ecological validity in the conclusions drawn about the diagnosis.

Limitations

The present study has limitations worth noting. First, the sample size is small. The small sample, combined with low base rates for sexual recidivism and low observed frequencies for certain sexual acts and violent behaviors limit the choice of statistical analyses and their power. Furthermore, small sample size limits generalization of the results to sex offenders in general. For instance, we cannot conclude on the prevalence rates of PCD. However, although small in size, our PCD group is somewhat comparable to the non-sadistic sexual offender group (Gratzer & Bradford, 1995), to the group with paraphilia NOS, nonconsent diagnosis (Richards & Jackson, 2011) and to non-sadistic rapists (Marshall et al., 2002) in studies examining offender and offense characteristics as well as to groups of sex offenders in studies

that focus on PPG data more specifically (e.g., Harris et al., 2012; Lalumière et al., 2003). It is noteworthy that, in spite of a modest sample size, we were able to observe a number of significant results with moderate to large effect sizes.

Second, sex offenders in the present study were referred to the clinic from forensic settings for an elaborate psycho-phallometric evaluation and constitute a high risk, high need population. Therefore, they might be seen as particularly extreme cases which may not allow generalization of the present results to a sex offender population in general, including non-incarcerated sexually aggressive individuals. Moreover, it is unclear to what extent the classification system of sex offenders that was derived based on sexual acts and violent behaviors can be reproduced if examined within a different population of sex offenders.

Third, the non-deviant group of sex offenders in the present study served as a comparison group to the preferential group of sex offenders. However, it is unclear whether the non-deviant group represents a true group of non-sexually motivated sex offenders (e.g., opportunist, vindictive), a group of sex offenders with "muted" sexual sadism, or a mix of both, sexual and non-sexual subtypes. To be able to answer these questions more precisely, a further examination of the files and phallometric data is required, which is beyond the scope of the present thesis. As such, the present study does not have a "true" control group. Due to this fact, we cannot state with confidence to what extent the observed differences, such as types of sexual activities or violent behaviors committed in the context of sexual assault, are specific to PCD or how they compare to either non-sexual or sadistic offenders. Likewise, due to the fac that sex offenders with SSD were excluded from our study, we cannot draw firm conclusions regarding the underlying structure of PCD (continuous vs. categorical), although this task is beyond the objectives set forth in our study.

Overall, demonstrating that the group of sex offenders with PCD has distinct characteristics and patterns of behaviors is fundamental to showing its reliability and validity, which are necessary preliminary steps to establishing its broader construct validity. Comparison with control groups is essential to that end. As such, until further evidence, the present results should be interpreted and applied with caution. Nevertheless, despite the absence of a "true" control group, studying PCD group specifically is essential in order to help

us gain a more in depth understanding of this population which, in turn, can help orient future research. Moreover, differentiating preferential rapists from non-sexually motivated sex offenders (e.g., opportunistic, vindictive) who offend against adult women is as important, if not more, as differentiating preferential rapists from sadistic rapists, non-sexual offenders or community men. By examining preferential rapists among a "general pool" of sex offenders, the present study helps us better appreciate the challenging task that is discriminating preferential rapists from non-preferential rapists. This challenge may partly be attributed to the apparent lack of unique characteristics and overwhelming similarity/shared characteristics across subgroups.

Finally, we computed overall levels of sexual intrusiveness and violence by combining scores for each new sexual act and violent behavior across all sexual offenses for each sex offender. Although this strategy helped control the frequency of occurrence of sexual acts and violent behaviors, it only offered a partial control for the total number of victims. Other strategies may better control for the total number of victims (e.g., computing overall level of sexual intrusiveness and violence by adding all sexual acts, including the repeated acts within and across all victims, and dividing the score by total number of victims). However, each method presents its own limits and advantages; the total scores computed based on the method selected in the present study seemed to best reflect the *spectrum* of sexual acts and violent behaviors that sex offenders resorted to, which was our objective. Likewise, due to the fact that all sexual assaults were examined as overall scores for sexual intrusiveness and violence, we could not evaluate whether there was an escalation in terms of sexual acts or violent behaviors from the first to the next sexual offense. It might be a pertinent avenue for future research in order to better understand whether developmentally, the expression of sexual acts and violent behaviors during sexual assault is "fixed" or "dynamic" in nature, or is characterized by a mix of both depending on the group of sex offenders being studied or the characteristics (e.g., personality traits) of sex offenders that constitute the group being examined. Moreover, no attempt was made to specify when certain acts, such as violent behaviors, took place during sexual offense (e.g., before, during, or after the assault) nor the type of injury that the victim sustained (e.g., facial injury, broken ribs, etc.). Such precisions may further inform us as to the potential function of violence (e.g., instrumental vs. sadistic).

Future Directions and Conclusion

The present study points to pertinent avenues of future research. First, it is important to replicate the present findings using larger samples and control groups, such as sexual sadists or non-sexual violent offenders, for a greater generalization and firmer conclusions as to the diagnostic value of the results observed in the present study. Human sexuality is complex and there is a lot to be learned about it. This is especially true for paraphilias and paraphilic disorders, especially those involving non-consenting targets. Due to the very nature of paraphilic disorders – private, socially sanctioned and potentially illegal – obtaining accurate information on the origins, development, manifestations and prevalence rates is extremely difficult. Currently, most studies of PCD are conducted with convicted sex offenders who have very little to gain by overt admission of their deviant sexual interests and activities. It has been highlighted in the literature that the confidentiality of information can have a powerful effect on the accuracy and quantity of self-reported data (e.g., Abel & Rouleau, 1990), such as number and diversity of paraphilic acts. As such, it would be ideal to conduct studies with men who admit to having sexually coerced adult women (within a consenting or a non-consenting relationship), whether they have or have not come in contact with the authorities, by assuring them of confidentiality. Such studies may enable us to obtain a more accurate picture of the prevalence rates, as well as a better understanding of the nature of PCD and the individual afflicted with it.

Amongst the variables that merit further investigation are number and types of victims/partners, offender-victim relationship, personality type, exactly *what* about non-consent is sexually arousing, expression of deviant sexual interests on a daily basis (e.g., presence of non-normative sexual activities within consenting relationships, use of pornography with non-consensual content) and the complex interplay between these variables. Such research may offer further insights into pertinent behavioral markers. Understanding the motives underlying sexual offending is an important task in the assessment, treatment and consequently, prevention of sexual crimes that can have a range of short and long term psychological, emotional and physical consequences for the victim (e.g., post traumatic stress disorder and depression, Hanson, 1990; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992; problems in sexual functioning, Becker, Abel, & Skinner, 1979; alcohol and drug related

problems, Kilpatrick, Edmunds, & Seymour, 1992; and long-term medical complications, such as gastrointestinal complaints, headaches and chronic pelvic pain, Koss & Heslet, 1992). In this regard, designing studies that promote a disclosure of accurate information, while taking appropriate measures to insure the safety of all parties involved, seems not only desirable but also essential. Although such measures have been applied to research elsewhere (e.g., Certificate of Confidentiality, United States of America; Abel & Rouleau, 1990), it presents an important challenge in Canada.

Second, in the present study, we focused on a combination of offense characteristics across all officially known sexual assaults in an attempt to uncover behavioral markers of rape-proneness. In the future, it may be pertinent to examine each sexual assault separately to understand the evolution or "fixity" of sexual acts, violent behaviors, as well as strategies used by the perpetrator to gain access to the victim. Such information may help distinguish sex offenders with PCD from other groups of sex offenders and provide avenues for treatment interventions. For instance, if the link between certain sexual activities, such as exhibitionism and rape, is chronologically established, it may serve as cues for early detection, treatment targets and prevention in those at risk to sexually (re)offend.

Third, the intrusiveness and severity of sexual acts and violent behaviors that the victim was subjected to is commonly established by researchers and applied uniformly across all victims for each sex offender. However, the experience of distress, pain and coercion is highly subjective and is also likely to vary from one victim to another even for the same sex offender. Yet, the victim's perspective is often neglected in research. It seems relevant to obtain the victims' personal accounts of sexual aggression. In combination with sex offenders' accounts, medical reports, and other relevant data, the victim's input can help build a more accurate and complete picture of the assault, the perpetrator, as well as the level and function of violence employed. This line of research presents its own set of challenges, including access to victims of sexual assault willing to take part in research. Nevertheless, taking victims' experience into account may be of particular relevance to study the relationship between PCD and SSD. Regardless of the research methods used to study PCD, it would be important that researchers describe how exactly the PCD diagnosis was made in order to make comparisons across studies more meaningful.

In conclusion, sexual arousal, deviant or not, is multifaceted, and it is imperative to take into consideration different measures of sexual arousal to reflect its multidimensional nature. The present research project provides non-negligible empirical evidence supporting reliance on behavioral markers, particularly sexual acts, during the assessment process. The present results also caution against the reliance on easily available data – such as number of victims – without taking into consideration other evidence supporting the presence of deviant sexual interest in coercive sexuality. However, more research on PCD is necessary whether it be by focusing efforts on developing phallometric stimuli that are better able to capture deviant sexual interests in coercion, on standardizing phallometric evaluation within and across laboratories, or on further examining behavioral markers (sexual and violent acts, personality characteristics, etc.). PCD is a complex matter with a controversial history that spans over three decades. Although PCD has received empirical support, its valid and reliable diagnosis remains a challenging task. As such, it is prudent to leave it out of the diagnostic manual until more reliable and rigorous methods of assessing PCD and distinguishing it from other conditions are available. We do not expect to have resolved all the controversies surrounding PCD. Nonetheless, it is our hope that the present study provides some insights into the matter and will stimulate future research regardless of PCD's status in the diagnostic manual.

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APPENDICES

Appendix A
Consent Form for the Evaluation Process and the Use of the Data in Future Research

C.E.R.U.M.
Centre d'Étude et de Recherche de l'Université de Montréal

(NOUVEAU) CONSENTEMENT À LA PROCÉDURE D'ÉVALUATION DES PROBLÉMATIQUES SEXUELLES

À la personne évaluée au CERUM :

Cette procédure d'évaluation fut élaborée par Docteur Joanne-Lucine Rouleau, psychologue, professeur agrégé au Département de Psychologie de l'Université de Montréal et a reçu l'accréditation d'un comité d'experts internationaux dans le domaine de l'évaluation des problématiques sexuelles.

L'évaluation faite au CERUM a pour but d'évaluer si vous présentez une problématique sexuelle, le cas échéant, de déterminer des avenues de traitement et finalement de mesurer les impacts de ce traitement.

La procédure d'évaluation comprend quatre parties : une étude de votre dossier, une entrevue, quelques questionnaires psychologiques et une évaluation en laboratoire.

Présentement sous surveillance fédérale, vous êtes référés pour cette évaluation par le Service correctionnel du Canada qui nous a transmis votre dossier afin que nous puissions prendre connaissance d'aspects importants de votre vie incluant les présents délits, l'histoire délictuelle, le développement sexuel, l'histoire familiale, l'utilisation de drogue et d'alcool, les rapports psychologiques et psychiatriques et les implications antérieures dans des programmes de traitement. Cette partie de la procédure d'évaluation est faite préalablement à la journée où a lieu l'entrevue, la passation des questionnaires et l'évaluation en laboratoire. Cette étude du dossier a permis dans votre cas d'établir qu'il était pertinent de vous faire bénéficier de la procédure d'évaluation.

L'évaluation des problématiques sexuelles du CERUM débute par une entrevue standardisée visant à évaluer l'historique de votre vie sexuelle. Afin de mieux vous comprendre, l'évaluateur qui est un psychologue spécialisé dans le domaine de la délinquance sexuelle et membre de l'Ordre des Psychologues du Québec vous posera alors des questions sur l'histoire de votre vie sexuelle et sentimentale de votre enfance jusqu'à aujourd'hui en incluant les abus sexuels pour lesquels vous avez été condamnés. Quelques autres questions pourront également porter sur d'autres aspects de votre vie. Il est possible que le fait de relater votre histoire sexuelle vous amène à ressentir des sentiments désagréables. Si cela se produit, n'hésitez pas à en parler avec l'évaluateur, il pourra vous offrir un support thérapeutique lors de l'évaluation ou suite à celle-ci si vous en éprouvez le besoin.

Ensuite vous aurez à remplir quatre questionnaires psychologiques visant à mieux vous connaître. Ils portent sur divers aspects de votre fonctionnement et deux d'entre eux s'adressent plus particulièrement à vos attitudes, croyances et intérêts face à la sexualité.

L'évaluation des attirances sexuelles est une partie importante de l'évaluation complète des problématiques d'abus sexuels. Cet aspect de l'évaluation a pour but d'avoir un profil de vos intérêts sexuels. Ce profil sert à déterminer, si nécessaire, des objectifs de traitement et à mesurer l'impact de ce traitement.

Lors de la séance d'évaluation psychophysiologique, votre degré d'excitation sexuelle sera mesuré à l'aide d'un petit appareil constitué d'une mince courroie de caoutchouc contenant du mercure que vous installerez, en privé, autour de votre pénis. Cet appareil s'appelle une "jauge". Vous serez appelé à installer la jauge vous-même dans une pièce où vous serez seul. La jauge que vous aurez à utiliser aura été désinfectée, afin de réduire votre risque de contracter des maladies transmises sexuellement. Aucun cas d'infection causée par l'utilisation de ces jauges n'a été signalé depuis le début de leur utilisation au CERUM en 1990.

L'évaluation psychophysiologique se déroulera dans un laboratoire constitué de deux pièces adjacentes, soit la pièce où vous serez installé et celle du technicien servant de lieu d'enregistrement physiologique. La communication entre vous et l'évaluateur se fera à l'aide d'un système d'interphone. Il n'y a pas de caméra dans le laboratoire.

Les stimuli sexuels utilisés seront constitués par des bandes vidéos présentées à l'aide d'un magnétoscope et d'un téléviseur, par des diapositives qui seront projetées sur un mur et de bandes sonores que vous écouterez avec des écouteurs.

Les stimuli seront constitués d'images d'enfants, de femmes et d'hommes nus. Dépendamment du problème qui vous a amené à être référé au CERUM, les bandes sonores que vous entendrez pourront décrire des interactions sexuelles entre un homme et des femmes adultes selon différentes modalités dont certaines peuvent être violentes. Les bandes sonores peuvent également comporter des descriptions de contacts sexuels avec des enfants, certaines des interactions décrites peuvent être sexuellement explicites et violentes.

La séance d'évaluation psychophysiologique dure généralement de 90 à 120 minutes. Si, lors de l'évaluation de vos intérêts sexuels, vous ressentez le besoin de quitter la pièce pour vous rendre à la toilette, nous vous demandons, s'il-vous-plaît d'en informer l'évaluateur avant de vous désinstaller.

Vous recevrez des explications concernant vos réactions dans le laboratoire par l'équipe d'intervenants dès que cela sera possible.

Les données recueillies lors de cette procédure d'évaluation seront inscrites dans une banque de données et pourront être utilisées par la directrice du programme dans le but d'évaluer le programme de traitement, de développer des instruments d'évaluation et de conduire des recherches sur la nature et les causes des agressions sexuelles. En plus de vous aider à mieux vous connaître, votre participation à cette évaluation permettra l'avancement de la connaissance. Toutes ces recherches seront confidentielles, c'est-à-dire que vous ne pourrez y être dentifié. Un numéro de code sera attribué à chaque dossier et, conséquemment, aucune information permettant de vous identifier d'une manière ou d'une autre ne sera publiée. Seul le chercheur principal et la personne déléguée par lui auront accès à la liste de participants et aux résultats obtenus lors de la procédure d'évaluation.

Si, à n'importe quel moment vous avez des difficultés, des problèmes, des inquiétudes ou des questions au sujet de votre évaluation en laboratoire, n'hésitez pas à nous en faire part.

L'évaluation psychophysiologique des attirances sexuelles est une condition requise et un outil habituel au programme du CERUM.

L'entrevue, la passation de questionnaires et l'évaluation psychophysiologique des intérêts sexuels se déroulent au cours d'une même journée. Nous sommes en semi–confidentialité avec l'agent de libération conditionnelle du Service Correctionnel du Canada qui vous a référé, ce qui implique que dans les 10 jours ouvrables suivant notre rencontre, un rapport d'évaluation sera produit et envoyé à cette personne. Ce rapport sera mis à votre disposition.

Votre consentement écrit implique que vous comprenez que votre participation à l'évaluation est volontaire et que vous êtes libre de cesser celle-ci à tout moment. Si vous décidez de quitter la procédure, aucun des résultats recueillis ne serviront à la recherche.

Je,_____ (nom et S.E.D.) reconnais avoir lu la description de la procédure d'évaluation ou qu'elle m'a été lue. J'ai compris tout ce qui m'a été mentionné ci-haut et on a répondu de façon satisfaisante à toutes mes questions concernant ma participation à l'évaluation.

Date : _____

Signature : _____

Je_____ (nom de l'évaluateur) reconnais avoir expliqué le but, la nature, les avantages, les risques et les inconvénients de l'évaluation et avoir répondu au mieux de mes connaissances aux questions posées.

Date : _____

Signature : _____

Pour toute question concernant cette évaluation ou pour vous retirer de cette évaluation, vous pouvez communiquer avec le Docteur Joanne-Lucine Rouleau, psychologue. Toute plainte relative à votre participation à cette recherche peut être adressée à l'ombudsman de l'Université de Montréal, au numéro de téléphone ou à l'adresse courriel.

Appendix B

Static-99 Coding Form

Question Number	Risk Factor	Codes	Score
1	Young	Aged 25 or older Aged 18 – 24.99	0 1
2	Ever Lived With	Ever lived with a lover for at least two years? Yes No	 0 1
3	Index No-sexual violence - Any Convictions	No Yes	0 1
4	Prior No-sexual violence - Any Convictions	No Yes	0 1
5	Prior Sex Offenses	Charges / Convictions None / None 1-2 / 1 3-5 / 2-3 6+ / 4+	 0 1 2 3
6	Prior sentencing dates (exluding index)	3 or less 4 or more	0 1
7	Any convictions for No-contact sex offenses	No Yes	0 1
8	Any Unrelated Victims	No Yes	0 1
9	Any Stranger Victims	No Yes	0 1
10	Any Male Victims	No Yes	0 1
	Total Score	**Add up scores from individual risk factors**	

TRANSLATING STATIC 99 SCORES INTO RISK CATEGORIES

Score	Label for Risk Category
0,1	Low
2,3	Moderate-Low
4,5	Moderate-High
6 plus	High

Appendix C

Stable-2007 Tally Sheet

Subject Name: _____

Place of Scoring: _____

Date of Scoring: _____ Name of Assessor: _____

Scoring Item	Notes	Section Total
Significant Social Influences		
Capacity for Relationship Stability		
Emotional ID with Children	(Only score this item for offenders with victims age 13 or younger)	
Hostility toward women		
General Social Rejection		
Lack of concern for others		
Impulsive		
Poor Problem Solving Skills		
Negative Emotionality		
Sex Drive Sex Preoccupation		
Sex as Coping		
Deviant Sexual Preference		
<u>Deviant Sexual Interests in Possible Remission:</u> An offender who has scored a "2" based upon historical facts can have their Deviant Sexual Interest score reduced by one point if the following is present: The offender is involved in an age appropriate, consensual, satisfying sexual relationship of at least one year's duration while "at risk" in the community with the absence of behavioural indicators of Deviant Sexual Interest for 2 years. If the presence of this relationship has been confirmed by a credible, independent, collateral contact and the above condition applies you may enter and count a "negative 1" in this score box – reducing the offender's overall score by "1".		
Co-operation with Supervision		
	Sum for Final Total (Out of 24 for those without a child victim)	 26

Interpretive Ranges: 0 – 3 = Low, 4 – 11 = Moderate, 12+ = High