ORIGINAL PAPER

Is a Diagnostic Category for Paraphilic Coercive Disorder Defensible?

Raymond A. Knight

Published online: 3 November 2009 © American Psychiatric Association 2009

Abstract There is a proposal to establish a paraphilic coercive disorder as a new paraphilia in the DSM-V. The empirical data do not, however, support the hypothesis that a distinct syndrome exists that comprises males who are sexually aroused by the coercive elements of rape per se. Purported evidence for this syndrome has centered on the results of phallometric studies. Higher plethysmographic responses of rapists to coercive rape scenarios may, however, be better explained by the failure of coercive elements to inhibit arousal to sexual aspects of the stimuli rather than by arousal specifically to the coercive elements. In addition, sexual fantasies about forcing sex and about struggling victims are highly correlated with sadistic fantasies and have not been shown to identify a syndrome that can be discriminated from sadism. Finally, taxometric evidence strongly supports the hypothesis that the underlying components of rape are distributed as dimensions and do not constitute a separate taxon. Consequently, the criteria purported to categorize rapists into the proposed syndrome would have to be arbitrarily determined. Not only does there seem to be little empirical justification for the creation of this new syndrome, the inclusion of this disorder among the paraphilias would have serious potential for misuse. It would imply endorsement of Paraphilia, NOS, nonconsent, which is currently inappropriately employed in civil commitment proceedings to justify commitment.

Keywords Paraphilias · Paraphilic coercive disorder · Sadism · DSM-V

R. A. Knight (⋈) Department of Psychology, MS 062, Brandeis University, Waltham, MA 02454-9110, USA

e-mail: knight2@brandeis.edu

Introduction

The DSM-III-R (American Psychiatric Association, 1987) Paraphilia Subcommittee proposed that a coercive paraphilia category should be added to the paraphilias. Several factors were cited in support of their proposal. First, the extant phallometric data on sexually aggressive males suggested that there was a subset of rapists who, relative to controls, showed high rape indices (the ratio of plethysmographic [PPG] responses to stimuli associated with sexual coercion relative to their responses to stimuli depicting mutually consenting sexual activity (e.g., Abel, Barlow, Blanchard, & Guild, 1977; Barbaree, Marshall, & Lanthier, 1979; Earls & Proulx, 1986; Quinsey & Chaplin, 1984; Quinsey, Chaplin, & Varney, 1981). Second, in a number of the typological systems for rapists that had been proposed up to that time, a specific type of rapist had been identified whose motivation was hypothesized to be predominantly sexual (for a review, see Knight, Rosenberg, & Schneider, 1985). Third, Freund had proposed in his courtship disorder theory that some forms of rape involved distortions of normal courtship behavior (Freund, Scher, & Hucker, 1983, 1984; Freund, Scher, Racansky, Campbell, & Heasman, 1986). Here, aberrant sexual arousal was hypothesized to be a key motivational component at least for a significant subset of rapists, called preferential types (Freund, Seeley, Marshall, & Glinfort, 1972). The preferential rapist was hypothesized to be a paraphiliac, like the voyeur, the exhibitionist, and the frotteurist; and all of these paraphiliacs were hypothesized to represent distortions of normal courtship. This theory was consistent with the high instance of paraphilias found among sex offenders (e.g., Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Abel & Blanchard, 1974; Freund, 1990).

The introduction to the DSM-III-R of a specific diagnostic category for either biastophilia (a supposed paraphilia in



which non-consent, struggling, or resisting were hypothesized to be sexually arousing) or a more generic paraphilic coercive disorder (PCD) for preferential rapists was rejected more for political reasons than for any extant disconfirming empirical evidence about the validity of identifying such an hypothesized subset of rapists (Fuller, Fuller, & Blashfield, 1990). Although more recent data have continued to support the importance of the roles of both sexual motivation and sexual deviance in coercive sexual behavior (e.g., Knight, Ronis, Prentky, & Kafka, 2009; Knight & Sims-Knight, 2003, 2004), the original reasons for proposing a diagnostic category for paraphilic preferential rapists have encountered some challenging disconfirmations that question whether sexual arousal to coercive stimuli adequately accounts for the phallometric data, whether sexual arousal to coercion per se can be discriminated from sadism, and whether a distinct taxon of paraphilic rapists can be identified. I will address each of these issues in turn.

What is PPG Measuring in Rapists?

Although PPG data on sexual coercion have continued to support the hypothesis that rapists respond with higher sexual arousal to coercive sex stimuli than non-sex offenders (e.g., Lalumière, Quinsey, Harris, Rice, & Trautrimas, 2003), the hypothesis that rapists are sexually aroused by the coercive aspects of the stimuli used in PPG assessment has not been convincing. Two bodies of research challenge the hypothesis that a subset of rapists is sexually aroused by coercion per se. The first is the research on sadism, which suggests that there is little or no support in the PPG data for a category of PCD independent of sadism. The second body of research supports an inhibitory hypothesis that provides an alternative and arguably more consistent explanation of the rape index results than the preferential sexual arousal to coercion explanation. I will discuss each in turn.

Research on Phallometry and Sadism

The vast array of criteria generated to define sadism has provided little basis for cross-study comparisons and generalization (Marshall & Kennedy, 2003). A wide variety of violent behaviors has been proposed to identify the sadistic offender, including, for example, a pattern of extreme, gratuitous violence in the offense that often focuses on erogenous areas of the body and is sometimes characterized as bizarre or ritualized, humiliation or degradation of the victim, torture or mutilation of the victim, and acts in the offense manifesting domination and control over the victim (Knight & Prentky, 1990; Marshall & Hucker, 2006; Prentky & Knight, 1991). It is, however, considered central to the definition of sadism that the sadist derives pleasure either from

the physical or emotional suffering that he inflicts on another or from his control of, or domination over, others. The core feature in the various proposed definitions of sadism has been a fusion of sexual arousal, sexual fantasy, and a variety of aggressive and cruel behaviors (Knight & Prentky, 1990; Marshall & Kennedy, 2003). Archival records often lack information about the offender's cognitions, fantasies, and feelings. Yet, such records have been the source for making the diagnosis of sadism in most of the extant research. Consequently, clinicians have drawn inferences about the motivation, arousal, and pleasure of the offender in the offense without the appropriate supporting evidence (Knight, Prentky, & Cerce, 1994). Inferring sexual arousal to injury or distress even from detailed descriptions of offense behavior is a formidable task (Prentky & Knight, 1991).

It is not surprising, therefore, that the data on the relation of sadism to the rape index have been mixed. Studies that have used DSM criteria (Marshall & Kennedy, 2003; Seto & Kuban, 1996) have failed to find a positive relation between sadism so defined and the rape index. Indeed, Marshall and Kennedy (2003) found a significant negative relation between the diagnosis and the rape index, but they also found that their nonsadists were significantly higher than sadists on beating and torturing their victims, seriously questioning the validity of the DSM clinical diagnoses. In Seto and Kuban's (1996) study, although the DSM-diagnosed sadistic rapists who did not admit sadistic fantasies did not differ significantly from any other offender group or community controls, a group that included self-identified sadistic fantasizers, who had not acted on these fantasies, was the only group that differed significantly from community controls on arousal to violent rape and to nonsexual violence (see Table 2 in Seto & Kuban, 1996). Langevin et al. (1985), who confounded sadism with PCD because they included in their sadism group those with "inordinate arousal to control of victims" (p. 48), found no relation between sadism and the rape index.

The definition of sadism in the Massachusetts Treatment Center: Rapist Typology, Version 3 (MTC:R3; Knight, 1999, 2009; Knight & Prentky, 1990) provides specific behavioral criteria for sadism in an attempt to enhance diagnostic reliability and attains at least minimally acceptable reliability in this judgment. Phallometric assessments of MTC:R3 subtypes of rapists have found high rape indices in Overt Sadists more consistently than the previously described studies. Relative to other rapist types, Overt Sadists have produced the highest rape indices of all rapist types (Barbaree, Seto, Serin, Amos, & Preston, 1994; Preston, 1996; Proulx, 2001). In the two studies that used more discriminating and more violent audio stimuli (see Quinsey, Chaplin, & Upfold, 1984), the MTC:R3 Vindictive type of offender was also found to produce rape indices more like the Overt Sadists, whereas the less violent Non-Sadistic Sexual type, whose categorization criteria included the presence of hypersexuality, sexual deviance, or paraphilias,



showed rape indices that were indistinguishable from nonsexual Opportunistic offenders (Preston, 1996; Proulx, 2001). These results were consistent with the general finding that the largest effect size estimates in studies discriminating rapists from controls on the rape index have used more violent and graphic stimuli (Lalumière & Quinsey, 1994; Lalumière et al., 2003). Subsequent research on Vindictive offenders has found that they could not be distinguished from the Overt Sadists in their self-reported level of sadism on the Multidimensional Assessment of Sex and Aggression (MASA) (Knight, 1999, 2009), and they were higher on sadism scales than non-violent MTC:R3 offender types. Although other studies (Harris, 1998; Lalumière et al., 2003) have also found that rape indices correlated moderately with scores on the Psychopathy Checklist-Revised (PCL-R; Hare, 2003), the stronger covariates appear to be sadism and violence.

Experimental Manipulation of Stimuli in Phallometry

Barbaree and Marshall (1991) proposed an inhibition model of sexual coercion to explain sexually coercive males' higher arousal to coercive sexual stimuli. Their theory provides a potential explanation for the PPG results. Descriptions of foreplay and of the women's physical characteristics in consensual sex scripts have been found to increase sexual arousal for most men. The introduction of force and the consequent descriptions of pain, distress, and fear on the part of the woman in coercive scripts are hypothesized to inhibit sexual arousal for non-coercive males, but not for coercive males. This explanation is consistent both with the finding that rapists are not sexually aroused by scripts depicting nonsexual violence (e.g., Lalumière et al., 2003) and with PPG studies that have examined the issue experimentally in noncriminal samples (Bernat, Calhoun, & Adams, 1999; Lohr, Adams, & Davis, 1997). In both the Lohr et al. and the Bernat et al. experimental studies of college males, coercive elements were added to scenarios in sequential time blocks. Across multiple stimulus manipulations, the self-identified sexually coercive males consistently produced patterns of responding that indicated that their sexual arousal was not inhibited by the introduction of coercive elements, whereas non-sexually coercive males showed initial sexual arousal that was inhibited when coercive elements were introduced. The arousal trajectories of the self-identified sexually coercive males did not show increased arousal to coercive elements compared to their responses to consensual sexual stimuli.

The most parsimonious explanation of all of these data would hypothesize that more expressively aggressive rapist types have produced higher rape indices because their arousal to the sexual components of rape scenarios is less inhibited by violence and coercion than non-violent offenders. These more aggressive rapists have also tended to score higher on the PCL-R (Knight, 2009; Sitnikov, Goldberg, Daversa, & Knight, 2007). There is little evidence that high sexualization, the presence of paraphilias, or sexual deviance per se contributes substantially to the rape index. In all three MTC:R3 PPG studies, the Non-sadistic Sexual types both did not differ in their rape indices from non-violent, nonsexual types (i.e., the Opportunistic types) and were lower than the Overt Sadists. There are some data (Janssen, Vorst, Finn, & Bancroft, 2002) that suggest that there are individual differences both in sexual excitation and inhibition, and some evidence supports the hypothesis that paraphilias covary with hypersexuality (Kafka & Hennen, 2003). These data would suggest that individual differences in inhibition and not in excitation more likely explain the differential PPG responses in the MTC:R3 subtypes, because the presence of sexual violence proclivities and not the presence of paraphilias in offenders has been related to the rape index. These data do not provide any support for the hypothesis that there exists a subset of sex offenders who are differentially sexually aroused either provide data to counter the inhibition explanation or look elsewhere for support for this hypothesized diagnostic entity.

Role of Sadism and Sexualization in Rape

Role of Sadism in Fantasies About Sexual Offenses

In the factor analytic studies of offense planning items in the MASA and its revised clinical version, the Multidimensional Inventory of Development, Sex, and Aggression (MIDSA) (MIDSA, 2008), four robust factors have emerged that have been consistent across adult and juvenile offender samples, indicating that fantasies and cognitions about future offenses do not constitute a univocal construct. The first factor combines the respondent's fantasies about what sexual acts he would perform or would have the victim do to or for him sexually with fantasies that Cohen, Garofalo, Boucher, and Seghorn (1971) attributed to their compensatory rapist type and Groth, Burgess, and Holmstrom (1977) saw as characteristic of their similarly defined power-reassurance rapist. Hazelwood (1987) has referred to these as pseudo-unselfish fantasies, and Marshall (1989) discussed them in the context of seeking intimacy; hence, its name-Intimacy-Seeking Sexual Fantasies. In these fantasies, the rapist ignores the agonistic nature of the sexual assault and fantasizes that his sexual overtures will elicit a positive response in the victim. The second factor, Aggressive/Violent Fantasies, taps the offender's fantasies about physically harming, frightening, and even killing the victim. The third factor, Explicit Planning, captures both the offender's forethought in seeking a



particular victim and his fantasies about a particular location for an assault. The fourth, Eluding Apprehension, taps his plans to evade apprehension after the crime.

In the MASA and the MIDSA, one item asks about the frequency of having thoughts about forcing someone to have sex. There are also four items that capture the core of a purported PCD (reporting masturbating to the thought of forcing someone to have sex and being sexually aroused by making a woman do what the respondent wants sexually, by having a woman struggle, and by thoughts of overpowering someone). For 529 adult sex offenders, the Cronbach alpha of this fouritem PCD scale was .83. For the subset of this sample who exclusively assaulted women (>16 years old), the correlation between PCD scale and the thinking about forcing sex item was r(186) =.75, p < .001, but the PCD scale correlation with the sexual sadism fantasy scale was even higher, r(186) = .76, p < .001. When we partialled out sadism and the Intimacy-Seeking Fantasies factor, the correlation between the PCD scale and the frequency of thinking about rape dropped to r(176) = .40, p < .001. Thus, it appears that the majority of the PCD scale variance is associated with sadism. Moreover, although significant, only a small portion of its variance $([.40]^2 = 16\%)$ was uniquely related to fantasies about sexually coercing someone. Clearly, generic fantasizing about rape cannot be used as a criterion for PCD without first excluding the sadism and pseudointimacy components from such fantasy reports. Given the difficulty measuring sadism (Marshall & Hucker, 2006; Marshall & Kennedy, 2003), this is a daunting task that does not bode well for reasonable levels of reliability.

Role of Sexualization in Coercive Sexuality

Although phallometric assessments do not appear to provide strong evidence for a significant role of "sexualization" (i.e., sexual preoccupation, sexual compulsivity, hypersexuality, and sexual deviance) in sexually coercive behavior, other data do support the hypothesis that some aspect of sexual drive or sexual appetitive behavior is a critical component both in sexual aggression (Ellis, 1993; Malamuth, 1998) and in other "volitional impairments" of sexual behavior (Kafka, 1997, 2003; Kafka & Hennen, 2003). A number of investigations have found that sexually coercive males have consensual sex at an earlier age and have more consensual sex partners than do non-coercive males (Abbey, McAuslan, & Ross, 1998; Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Kanin, 1985; Koss & Dinero, 1988; Malamuth, Linz, Heavey, Barnes, & Acker, 1995; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Senn, Desmarais, Verberg, & Wood, 2000). Sexual drive and preoccupation have been found to discriminate sexually coercive from non-coercive males in both community and criminal samples (Knight et al., 2009). Regardless of criminal status, sexually coercive males have reported higher levels of sexual drive, greater frequency of sexual behavior, and more sexual deviance on MASA/ MIDSA (MIDSA, 2008) than non-coercive males. Residential juvenile sex offenders have also been found to score higher on these scales than non-sexual delinquents (Zakireh, Ronis, & Knight, 2008). Moreover, sexual drive, preoccupation, and compulsivity have also been found to correlate highly with each other and, in turn, with pornography use, expressive aggression toward women, sadism, pervasive anger, and offense planning for adult and juvenile sex offenders (Knight, 1999; Knight & Cerce, 1999).

In etiological models of sexual aggression directed both at women (Knight & Sims-Knight, 2003, 2004) and at children (Daversa & Knight, 2007), such appetitive fantasies and behaviors have played a mediating role, predicting the frequency of coercive behavior both against peers and adult women and against children for both juveniles and adults. In the Knight and Sims-Knight (2003, 2004) model for rape, the relation between sexualization and sexual coercion was mediated by expressive aggressive and sadistic fantasies. Lussier, Leclerc, Cale, and Proulx (2007) corroborated the importance of sexualization in developmental path models for both rapists and child molesters. In the former group, sexualization and externalization yielded the best fitting model, and in the latter the addition of an internalization latent trait improved the model. In a nationally representative sample of adolescent males, Casey, Beadnell, and Lindhorst (2009) also corroborated the importance of components of sexuality and delinquency for predicting sexually coercive behavior in adulthood.

The high prevalence of paraphilias that has been found among sex offenders (Abel & Osborn, 1992; Abel & Rouleau, 1990; Abel et al., 1988; Freund, 1988, 1990) is also consistent with the hypothesis that various aspects of sexualization play an important role in sexual aggression. On the Voyeurism, Transvestism, and Exhibitionism scales of the MIDSA, both adult and juvenile sex offenders reported higher levels of paraphilias than community controls (MIDSA, 2008). Whereas both groups were equivalent to controls on the Fetishism scale, juvenile, but not adult, sex offenders, scored higher than community controls on the Scatologia scale (MIDSA, 2008). Thus, there is evidence for higher frequency of paraphilias in four out of five MIDSA scales for the juvenile sex offenders and three out of five scales for adult sex offenders.

In light of these data, it is not surprising that the paraphilias and the high sexualization with which they correlate (Kafka, 1997; Knight, 1999) have been afforded an important role in some theories of sexually aggressive behavior against women (Freund, 1988, 1990), and that sexualization plays such a pivotal role in etiological models (Knight & Sims-Knight, 2003, 2004). The evidence in etiological models suggests a covariation between high sexualization and expressive aggression, anger, and sadistic fantasies. In the MASA database described earlier, the correlations between the PCD scale and various aspects of sexualization were found to be high, but not as high as the correlation with sadistic fantasy. When sadism



and other aspects of offense planning fantasies were partialled, smaller, but still significant, correlations between PCD and sexualization remained, comparable to the partialling results reported earlier. As we saw in the brief discussion of the offense planning scales, the interface of hypersexuality and rape fantasies is complex and cannot be used by itself to support the existence of PCD, independent of sadism. Moreover, determining whether differences on sexualization are distributed taxonically or dimensionally and can be used to identify a specific taxon of rapists requires a different analysis strategy that is addressed in the next section.

The Taxonomic Status of the Components of Rape

Despite the prevalence of clinical speculation about different rapist types and considerable evidence about the heterogeneity of rapists, research studies on rapist typologies have remained infrequent. Only one model, MTC:R3, has detailed classification criteria and has been subjected to empirical scrutiny by several laboratories (for a review, see Knight, 2009). Several new studies have been directed at the structural problems of MTC:R3 and have supported a revision of the typology into a modified dimensional circumplex structure that both addresses the structural faults of MTC:R3 and provides a speculative interface of the typology with recent research on the developmental antecedents of sexual aggression against women (Knight, 2009).

The proposed revised model has three components that account for the variability in rapists: callousness unemotionality, antisociality/impulsivity, and hypersexuality/sexualization. Whereas the first two components are comparable to the two primary factors of the PCL-R (Hare, 2003), the third is similar to the construct of hypersexuality proposed by Kafka (2003). A number of studies have used taxometric methods (Meehl, 1995) to address the problem of the latent distribution of psychopathy and antisociality, which contributes to the first two components of the typological model (Edens, Marcus, Lilienfeld, & Poythress, 2006; Guay, Ruscio, Knight, & Hare, 2007; Harris, Rice, & Quinsey, 1994; Marcus, John, & Edens, 2004; Skilling, Quinsey, & Craig, 2001; Vasey, Kotov, Frick, & Loney, 2005; Walters, Brinkley, Magaletta, & Diamond, 2008; Walters, Duncan, & Mitchell-Perez, 2007; Walters, Gray et al., 2007). Although the results appear mixed, many of the earlier studies unfortunately suffered from significant sampling and methodological weaknesses that limited their ability to provide a definitive answer to this question (for the details of these methodological problems, see Guay et al., 2007; Marcus, Sanford, Edens, Knight, & Walters, in press). More recent studies that have addressed these methodological flaws and that have also applied improvements in taxometric evaluation (Ruscio, Haslam, & Ruscio, 2006) have been more consistent, finding strong support for a dimensional latent structure for psychopathy (Edens et al., 2006; Guay et al., 2007; Marcus et al., 2004; Walters, Duncan et al., 2007; Walters, Gray et al., 2007; Walters et al., 2008). Taxometric analyses of the hypersexual/sexualization component of the circumplex model have not yielded as convincingly strong support for a dimensional latent distribution, but no evidence for a taxonic latent structure has emerged (Knight, 2009). The preponderance of the evidence supports a dimensional latent structure for the components of rape and argues against the proposition that there exists a paraphilic, sexualized, or preferential taxon that could serve as foundation for a distinct diagnostic category.

Harris, Rice, Hilton, Lalumière, and Quinsey (2007) have recently argued that combining precocious and coercive sexuality indicators with components of the PCL-R identifies a psychopathic sexuality taxon. The analyses they offered in support of their contention suffered, however, from methodological flaws similar to the previous work of this research group, as well as several problematic inconsistencies in the specific analyses they presented (see Marcus et al., in press). Further, their results have not been replicated by an independent group of researchers (Walters, Marcus, Edens, Knight, & Sanford, 2009). Little weight should be afforded their contention or the purported analyses they have presented to support it unless they are able to address these criticisms and garner independent corroboration. The failure to identify a psychopathic, a hypersexual, or a psychopathic sexuality taxon and the mounting evidence in favor of latent dimensionality means that any criteria that were proposed to identify the cutoff for a diagnostic category for PCD would likely be arbitrary. When these findings are coupled with the failure to provide any empirical evidence for paraphilic sexual arousal to the coercive characteristics of rape that is independent of sadism, they do not bode well for either the reliability or validity of any proposed diagnostic criteria.

Conclusions

In summary, although early data on the rape index in phallometric assessment seemed to provide potential support for PCD, recent studies have questioned this conclusion. First, experimental phallometric studies have supported the hypothesis that the differential arousal to sexually coercive scenarios in sexually coercive males seems to be explained better by the failure of coercive and aggressive elements to inhibit the sexual arousal of these males rather than by sexual arousal to the coercive elements per se. Second, although the assessment of sadism has remained problematic, the studies that have used more reliable criteria have found that sadists have high rape indices and non-sadistic sexual types of offenders have low indices. The phallometric literature on rapists does not provide convincing evidence that high rape indices

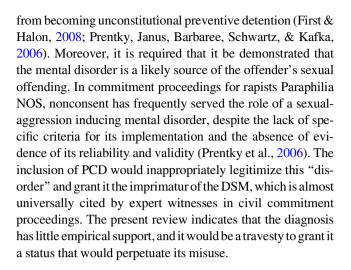


are related to sexual arousal to coercion, as opposed to failure to inhibit sexual arousal. Moreover, there is no empirical evidence that a sexual response to coercive stimuli can be differentiated from sexual sadism. This discrimination is an essential component of PCD. Third, offense related fantasies and cognitions about rape appear to be complex phenomena, largely driven by sexual and sadistic motivation. If there were an independent paraphilic coercive component, its differentiation would be difficult. Fourth, the only typology for rapists that had been empirically tested has been revised to a modified circumplex model with three underlying latent traits, hypersexuality, callousness/unemotionality, and antisociality (Knight, 2009). All methodologically sound taxometric studies on these traits support the hypothesis that the components of rape are distributed dimensionally rather than taxonically. There does not appear to be a distinct paraphilic rapist group that coheres naturally into a clearly identifiable diagnostic entity. Thus, the cutoffs to identify any paraphilic subgroup of rapists would have to be considered an arbitrary boundary created pragmatically to identify rapists high in a purported coercive paraphilic dimension. The criteria for classifying these rapists into this alleged diagnostic category would have to be considered discretionary.

The Paraphilias subworkgroup for the DSM-V should certainly not be influenced by legal consequences when it proposes the addition of well-validated diagnostic categories to the DSM-V. When the workgroup is considering, however, the inclusion of diagnoses with at best questionable reliability and validity, it must weigh the consequences of its decisions. Although it is laudable to include a category to draw clinicians' attention to distinctions that are being missed and to generate research on neglected areas, if the inclusion reifies a non-existent distinction that is likely to be misapplied, the resultant damage would outweigh any benefit that might be gained, and attention must be paid to these potential negative consequences. Two critical negative consequences are evident.

First, identifying and reifying a taxon implies a research strategy that emphasizes extreme group designs that attempt to distinguish the putative taxon from other discrete groups of rapists that have been formed for comparison purposes (e.g., Lilienfeld, 1994). It de-emphasizes dimensional designs, such as the quantitative, latent trait model-based approach proposed by Krueger, Markon, Patrick, and Iacono (2005) in explicating the comorbidity among externalizing disorders. It also is not compatible with the recent increase in research on subclinical manifestations of disorders (e.g., Hall & Benning, 2006; Knight & Sims-Knight, 2003). Searching for the identifying characteristics of a non-existent taxon will delay the task of discerning the underlying dimensions of rape and explicating their etiology and life course.

Second, the criteria for civil commitment depend on some form of mental disorder to legitimize the process and keep it



Acknowledgements I would like to thank Jane Harries, Matthew King, Elizabeth Saunders, and Judith Sims-Knight for their insightful comments and suggestions on an earlier version of this article. The author is an Advisor to the DSM-V Paraphilias subworkgroup of the Sexual and Gender Identity Disorders Workgroup (Chair, Kenneth J. Zucker, Ph.D.). Reprinted with permission from the *Diagnostic and Statistical Manual of Mental Disorders V Workgroup Reports* (Copyright 2009), American Psychiatric Association.

References

- Abbey, A., McAuslan, P., & Ross, L. T. (1998). Sexual assault perpetration by college men: The role of alcohol, misperception of sexual intent, and sexual beliefs and experiences. *Journal of Social* and Clinical Psychology, 17, 167–195.
- Abbey, A., McAuslan, P., Zawacki, T., Clinton, A., & Buck, P. (2001).
 Attitudinal, experiential, and situational predictors of sexual assault perpetration. *Journal of Interpersonal Violence*, 16, 784–806.
- Abel, G. G., Barlow, D. H., Blanchard, E. B., & Guild, D. (1977). The components of rapists' sexual arousal. Archives of General Psychiatry, 34, 895–903.
- Abel, G. G., Becker, J. V., Cunningham-Rathner, J., Mittelman, M., & Rouleau, J. (1988). Multiple paraphilic diagnoses among sex offenders. Bulletin of the American Academy of Psychiatry and the Law, 16, 153–168.
- Abel, G. G., & Blanchard, E. B. (1974). The role of fantasy in the treatment of sexual deviation. Archives of General Psychiatry, 30, 467–475.
- Abel, G. G., & Osborn, C. A. (1992). The paraphilias: The extent and nature of sexually deviant and criminal behavior. *Psychiatric Clinics of North America*, 15, 675–687.
- Abel, G. G., & Rouleau, J. L. (1990). The nature and extent of sexual assault. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 9–12). New York: Plenum Press.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., revised). Washington, DC: Author
- Barbaree, H. E., & Marshall, W. L. (1991). The role of male sexual arousal in rape: Six models. *Journal of Consulting and Clinical Psychology*, 59, 621–630.
- Barbaree, H. E., Marshall, W. L., & Lanthier, R. D. (1979). Deviant sexual arousal in rapists. *Behaviour Research and Therapy*, 17, 215–222.



- Barbaree, H. E., Seto, M. C., Serin, R. C., Amos, N. L., & Preston, D. L. (1994). Comparisons between sexual and nonsexual rapist subtypes: Sexual arousal to rape, offence precursors, and offense characteristics. *Criminal Justice and Behavior*, 21, 95–114.
- Bernat, J. A., Calhoun, K. S., & Adams, H. E. (1999). Sexually aggressive and nonaggressive men: Sexual arousal and judgments in response to acquaintance rape and consensual analogues. *Journal of Abnormal Psychology*, 108, 662–673.
- Casey, E. A., Beadnell, B., & Lindhorst, T. P. (2009). Predictors of sexually coercive behavior in a nationally representative sample of adolescent males. *Journal of Interpersonal Violence*, 24, 1129–1147.
- Cohen, M. L., Garafalo, R. F., Boucher, R., & Seghorn, T. (1971). The psychology of the rapist. *Seminars in Psychiatry*, *3*, 307–327.
- Daversa, M., & Knight, R. A. (2007). A structural examination of the predictors of sexual coercion against children in adolescent sexual offenders. *Criminal Justice and Behavior*, 34, 1313–1333.
- Earls, C. M., & Proulx, J. (1986). The differentiation of francophone rapists and non-rapists using penile circumferential measures. *Criminal Justice and Behavior*, 13, 419–429.
- Edens, J. F., Marcus, D. K., Lilienfeld, S. O., & Poythress, N. G. (2006). Psychopathic, not psychopath: Taxometric evidence for the dimensional structure of psychopathy. *Journal of Abnormal Psychology*, 115, 131–144.
- Ellis, L. (1993). Rape as a biosocial phenomenon. In G. C. Nagayama Hall, R. Hirschman, J. R. Graham, & M. S. Zaragoza (Eds.), *Sexual aggression: Issues in etiology and assessment, treatment and policy* (pp. 17–41). Washington, DC: Hemisphere Publishing Corp.
- First, M. B., & Halon, R. L. (2008). Use of DSM paraphilia diagnosis in sexually violent predator commitment cases. *Journal of the American Academy of Psychiatry and Law, 36*, 443–454.
- Freund, K. (1988). Courtship disorder: Is this hypothesis valid? In R. A. Prentky & V. Quinsey (Eds.), *Human sexual aggression: Current perspectives* (Vol. 528, pp. 172–182). New York: Annals of the New York Academy of Sciences.
- Freund, K. (1990). Courtship disorder. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *The handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 195–207). New York: Plenum Press.
- Freund, K., Scher, H., & Hucker, S. (1983). The courtship disorders. *Archives of Sexual Behavior*, 12, 369–379.
- Freund, K., Scher, H., & Hucker, S. (1984). The courtship disorders: A further investigation. *Archives of Sexual Behavior*, 13, 133–139.
- Freund, K., Scher, H., Racansky, I. G., Campbell, K., & Heasman, G. (1986). Males disposed to commit rape. Archives of Sexual Behavior, 15, 23–35.
- Freund, K., Seeley, H. R., Marshall, W., & Glinfort, E. K. (1972). Sexual offenders needing special assessment and/or therapy. *Canadian Journal of Criminology*, *14*, 345–365.
- Fuller, A. K., Fuller, A. E., & Blashfield, R. K. (1990). Paraphilic coercive disorder. *Journal of Sex, Education & Therapy, 16*, 164–171.
- Groth, A. N., Burgess, A. W., & Holmstrom, L. L. (1977). Rape: Power, anger, and sexuality. American Journal of Psychiatry, 134, 1239–1243.
- Guay, J. P., Ruscio, J., Knight, R. A., & Hare, R. (2007). A taxometric analysis of the latent structure of psychopathy: Evidence for dimensionality. *Journal of Abnormal Psychology*, 116, 701–716.
- Hall, J. R., & Benning, S. D. (2006). The "successful" psychopath: Adaptive and subclinical manifestations of psychopathy in the general population. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 459–478). New York: Guilford Press.
- Hare, R. D. (2003). The Psychopathy Checklist-Revised technical manual (2nd ed.). Toronto, Canada: Multi-Health Systems.
- Harris, G. T. (1998, October). Psychopathy and sexual deviance. Paper presented at the Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, Vancouver, BC, Canada.

- Harris, G. T., Rice, M. E., Hilton, N. Z., Lalumière, M. L., & Quinsey, V. L. (2007). Coercive and precocious sexuality as a fundamental aspect of psychopathy. *Journal of Personality Disorders*, 21, 1–27.
- Harris, G. T., Rice, M. E., & Quinsey, V. L. (1994). Psychopathy as a taxon: Evidence that psychopaths are a discrete class. *Journal of Consulting and Clinical Psychology*, 62, 387–397.
- Hazelwood, R. R. (1987). Analyzing the rape and profiling the offender. In R. R. Hazelwood & A. W. Burgess (Eds.), *Practical aspects of rape investigation: A multidisciplinary approach* (pp. 169–199). New York: Elsevier.
- Janssen, E., Vorst, H., Finn, P., & Bancroft, J. (2002). The sexual Inhibition (SIS) and sexual excitation (SES) scales: II. Predicting psychophysiological responses patterns. *Journal of Sex Research*, 39, 127–132
- Kafka, M. P. (1997). Hypersexual desire in males: An operational definition and clinical implications for males with paraphilias and paraphilia-related disorders. Archives of Sexual Behavior, 26, 505–526.
- Kafka, M. P. (2003). Sex offending and sexual appetite: The clinical and theoretical relevance of hypersexual desire. *International Journal* of Offender Therapy & Comparative Criminology, 47, 439–451.
- Kafka, M. P., & Hennen, J. (2003). Hypersexual desire in males: Are males with paraphilias different from males with paraphilia-related disorders? Sexual Abuse: A Journal of Research and Treatment, 15, 307–321.
- Kanin, E. J. (1985). Date rapists: Differential sexual socialization and relative deprivation. Archives of Sexual Behavior, 14, 219–231.
- Knight, R. A. (1999). Validation of a typology for rapists. *Journal of Inter*personal Violence, 14, 297–323.
- Knight, R. A. (2009). Typologies for rapists: The generation of a new structural model. In A. Schlank (Ed.), *The sexual predator* (Vol. 4, Chapter 17, pp. 1–28). New York: Civic Research Institute.
- Knight, R. A., & Cerce, D. D. (1999). Validation and revision of the Multidimensional Assessment of Sex and Aggression. *Psychologica Belgica*, 39, 187–213.
- Knight, R. A., & Prentky, R. A. (1990). Classifying sexual offenders: The development and corroboration of taxonomic models. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *The handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 23–52). New York: Plenum Press.
- Knight, R. A., Prentky, R. A., & Cerce, D. D. (1994). The development, reliability, and validity of an inventory for the Multidimensional Assessment of Sex and Aggression. *Criminal Justice and Behavior*, 21, 72–94.
- Knight, R. A., Ronis, S., Prentky, R. A., & Kafka, M. (2009). The role of sexual motivation in sexually coercive behavior. Manuscript submitted for publication.
- Knight, R. A., Rosenberg, R., & Schneider, B. (1985). Classification of sexual offenders: Perspectives, methods, and validation. In A. W. Burgess (Ed.), Research handbook on rape and sexual assault (pp. 222–293). New York: Garland Publishing.
- Knight, R. A., & Sims-Knight, J. E. (2003). Developmental antecedents of sexual coercion against women: Testing of alternative hypotheses with structural equation modeling. In R. A. Prentky, E. Janus, & M. Seto (Eds.), Sexual coercion: Understanding and management (pp. 72–85). New York: New York Academy of Sciences.
- Knight, R. A., & Sims-Knight, J. E. (2004). Testing an etiological model for male juvenile sexual offending against females. *Journal of Child Sexual Abuse*, 13, 33–55.
- Koss, M. P., & Dinero, T. E. (1988). Predictors of sexual aggression among a national sample of male college students. In R. A. Prentky & V. L. Quinsey (Eds.), *Human sexual aggression: Current per*spectives (pp. 133–147). New York: The New York Academy of Sciences.
- Krueger, R. F., Markon, K. E., Patrick, C. J., & Iacono, W. G. (2005).Externalizing psychopathology in adulthood: A dimensional-spec-



426 Arch Sex Behav (2010) 39:419–426

trum conceptualization and its implications for DSM-V. *Journal of Abnormal Psychology*, 114, 537–550.

- Lalumière, M. L., & Quinsey, V. L. (1994). The discriminability of rapists from non-sex offenders using phallometric measures: A meta-analysis. Criminal Justice and Behavior, 21, 150–175.
- Lalumière, M. L., Quinsey, V. L., Harris, G. T., Rice, M. E., & Trautrimas, C. (2003). Are rapists differentially aroused by coercive sex in phallometric assessments? In R. A. Prentky, E. Janus, & M. Seto (Eds.), Sexual coercion: Understanding and management (pp. 211–224). New York: New York Academy of Sciences.
- Langevin, R., Bain, J., Ben-Aron, M. H., Coulthard, R., & Day, D. (1985). Sexual aggression: Constructing a prediction equation. A controlled pilot study. In R. Langevin (Ed.), Erotic preference, gender identity, and aggression in men: New research studies (pp. 39– 76). Hillsdale, NJ: Erlbaum.
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. Clinical Psychology Review, 14, 17–38.
- Lohr, B. A., Adams, H. E., & Davis, J. M. (1997). Sexual arousal to erotic and aggressive stimuli in sexually coercive and noncoercive men. *Journal of Abnormal Psychology*, 106, 230–242.
- Lussier, P., Leclerc, B., Cale, J., & Proulx, J. (2007). Developmental pathways of deviance in sexual aggressors. *Criminal Justice and Behavior*, 34, 1441–1462.
- Malamuth, N. M. (1998). An evolutionary-based model integrating research on the characteristics of sexually coercive men. In J. Adair, K. Dion, & D. Belanger (Eds.), Advances in psychological science (Vol. 2): Personal, social, and developmental aspects (pp. 151–184). Hove, UK: Psychology Press.
- Malamuth, N. M., Linz, D., Heavey, C. L., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of Personality and Social Psychology*, 69, 353–369.
- Malamuth, N. M., Sockloskie, R. J., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting* and Clinical Psychology, 59, 670–681.
- Marcus, D. K., John, S. L., & Edens, J. F. (2004). A taxometric analysis of psychopathic personality. *Journal of Abnormal Psychology*, 113, 626–635.
- Marcus, D. K., Sanford, G. M., Edens, J. F., Knight, R. K., & Walters, G. D. (in press). Taxometrics and evolutionary theory: The case of the psychopathic sexuality taxon. *Scientific Review of Mental Health Practice*.
- Marshall, W. L. (1989). Intimacy, loneliness and sexual offenders. *Behaviour Research and Therapy*, 27, 491–503.
- Marshall, W. L., & Hucker, S. J. (2006). Issues in the diagnosis of sexual sadism. Sexual Offender Treatment, 1, 1–4.
- Marshall, W. L., & Kennedy, P. (2003). Sexual sadism in sexual offenders: An elusive diagnosis. Aggression and Violent Behavior, 8, 1–22.
- Meehl, P. E. (1995). Bootstraps taxometrics: Solving the classification problem in psychopathology. *American Psychologist*, *50*, 266–275.
- MIDSA Clinical Manual. (2008). Bend, OR: Augur Enterprises, Inc. Available at www.midsa.us.
- Prentky, R. A., Janus, E., Barbaree, H., Schwartz, B. K., & Kafka, M. P. (2006). Sexually violent predators in the courtroom: Science on trial. *Psychology, Public Policy, and Law, 12*, 357–393.
- Prentky, R. A., & Knight, R. A. (1991). Identifying critical dimensions for discriminating among rapists. *Journal of Consulting and Clini*cal Psychology, 59, 643–661.

- Preston, D. L. (1996). Patterns of sexual arousal among rapist subtypes. Dissertation Abstracts International: Section B: The Sciences & Engineering, 56(11-B), 6445.
- Proulx, J. (2001, November). Sexual preferences and personality disorders of MTC:R3 rapist subtypes. Symposium presented at the Annual Meeting of the Association for the Treatment of Sexual Abusers, San Antonio, TX.
- Quinsey, V. L., & Chaplin, T. C. (1984). Stimulus control of rapists' and non-sex offenders' sexual arousal. *Behavioral Assessment*, 6, 169–176.
- Quinsey, V. L., Chaplin, T. C., & Upfold, D. (1984). Sexual arousal to nonsexual violence and sadomachistic themes among rapists and non-sex-offenders. *Journal of Consulting and Clinical Psychol*ogy, 52, 651–657.
- Quinsey, V. L., Chaplin, T. C., & Varney, G. (1981). A comparison of rapists' and non-sex offenders' sexual preferences for mutually consenting sex, rape, and physical abuse of women. *Behavioral Assessment*, 3, 127–135.
- Ruscio, J., Haslam, N., & Ruscio, A. M. (2006). Introduction to the taxometric method: A practical guide. Mahwah, NJ: Lawrence Erlbaum.
- Senn, C. Y., Desmarais, S., Verberg, N., & Wood, E. (2000). Predicting coercive sexual behavior across the lifespan in a random sample of Canadian men. *Journal of Social and Personal Relationships*, 17, 95–113.
- Seto, M. C., & Kuban, M. (1996). Criterion-related validity of a phallometric test for paraphilic rape and sadism. *Behaviour Research* and Therapy, 34, 175–183.
- Sitnikov, L., Goldberg, J., Daversa, M. T., & Knight, R. A. (2007, April). The interplay of the factors of psychopathy and borderline personality disorder in predicting violence in sexual offenders. Poster presented at the Biannual Meeting of the Society for the Scientific Study of Psychopathy, St. Petersburg, FL.
- Skilling, T. A., Quinsey, V. L., & Craig, W. M. (2001). Evidence of a taxon underlying serious antisocial behavior in boys. *Criminal Jus*tice and Behavior, 28, 450–470.
- Vasey, M. W., Kotov, R., Frick, P. J., & Loney, B. R. (2005). The latent structure of psychopathy in youth: A taxometric investigation. *Journal of Abnormal Child Psychology*, 33, 411–429.
- Walters, G. D., Brinkley, C. A., Magaletta, P. R., & Diamond, P. M. (2008). Taxometric analysis of the Levenson Self-Report Psychopathy scale. *Journal of Personality Assessment*, 90, 491–498.
- Walters, G. D., Duncan, S. A., & Mitchell-Perez, K. (2007). The latent structure of psychopathy: A taxometric investigation of the Psychopathy Checklist—Revised in a heterogeneous sample of male prison inmates. Assessment, 14, 270–278.
- Walters, G. D., Gray, N., Jackson, R., Sewell, K., Rogers, R., Taylor, J., et al. (2007). A taxometric analysis of the Psychopathy Checklist: Screening Version (PCL:SV): Further evidence of dimensionality. Psychological Assessment, 19, 330–339.
- Walters, G. D., Marcus, D. K., Edens, J. F., Knight, R. A., & Sanford, G. M. (2009). In search of the psychopathic sexuality taxon: Indicator size does matter. Manuscript submitted for publication.
- Zakireh, B., Ronis, S. T., & Knight, R. A. (2008). Individual beliefs, attitudes, and victimization histories of male juvenile sexual offenders. Sexual Abuse: A Journal of Research and Treatment, 20, 323–351.

