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The Effect of Sexual Arousal on
Rapists' Implicit and Explicit Attitudes towards Rape

A thesis submitted to
the Faculty of Graduate Studies and Research
in Partial Fulfillment of the requirements for the degree

Masters of Arts in Psychology

by

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Abstract

Previous research on rapists' cognitions has primarily focused on rape-related constructs, not specifically on attitudes towards rape, and has been limited to explicit cognitions. Furthermore, recent studies have found that sexual arousal changes perceptions of deviant sexual acts and the reported likelihood of being sexually coercive in male undergraduate students (Ariely & Loewenstein, 2006). The influence of sexual arousal on implicit and explicit attitudes toward rape was examined using data collected from 24 rapists and 12 non-sex offenders. Results demonstrated that when sexually aroused rapists' implicitly evaluated rape less negatively but explicitly evaluated rape more negatively than when non-aroused. Sexual arousal had no significant influence on non sex offenders' implicit and explicit attitudes towards rape. The results of this study offer valuable insight about the potential role of sexual arousal and offence supportive attitudes in the commission of sexually aggressive behaviour.

Keywords: rape, implicit, explicit, attitudes, cognition, sexual arousal

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The Effect of Sexual Arousal on Rapists' Implicit and Explicit Attitudes towards Rape

National surveys have estimated that 1,977 of every 100,000 Canadian women have experienced sexual assault (Brennan & Taylor-Butts, 2008). In addition to the physical consequences of rape, such as injury, unwanted pregnancy and sexually transmitted infections, past research has estimated that 49% of rape victims suffer from post traumatic stress disorder (PTSD) and that 39% of rape victims meet the criteria for a mood or anxiety disorder other than PTSD (Littleton & Breitkopf, 2006). In hopes of preventing future sexual assaults, many researchers have turned their attention towards understanding sexually aggressive behaviour.

Cognitions supportive of sexual offending have been theorized to play an integral role in the maintenance of sexual assault (for an overview see Gannon, Collie, Ward, & Thakker, 2008). In the rape-related literature cognitions refer to *attitudes toward rape*, *offence supportive beliefs*, *rape myths*, and *cognitive distortions*. Much of the rape-related literature has focused on the cognitions that rapists have, not exclusively on their attitudes and has been limited to self-report (e.g., Bumby, 1996).

Additionally, it has been hypothesized that attitudes can change to reflect temporary mental states, such as when one is sexually aroused. In support of this hypothesis, recent studies have found that sexual arousal changes the reported likelihood of being sexually coercive in male undergraduate students (Ariely & Loewenstein, 2005; Bouffard, 2002). To date, the effect of sexual arousal on attitudes towards rape has not been examined. The purpose of this study will be to investigate rapists' implicit and

explicit attitudes towards rape, as well as, to assess the impact sexual arousal has on such attitudes.

Attitudes and Rape

Theoretical Relationship between Attitudes and Behaviour

In the social psychology literature, theory suggests attitudes influence behaviour. Generally, attitudes fall within the more encompassing cognitions construct and are defined as the evaluation of a psychological object (e.g., behaviour, person, or place) on a relative attribute scale (e.g., rape is positive-negative; Ajzen, 2001). A prominent model outlining the relationship between attitudes and behaviour is Ajzen's (1991) *Theory of Planned Behaviour*. This model suggests that behaviour is a function of intentions to commit the behaviour coupled with the degree of control one has over the situation (e.g., intention to commit rape plus the availability of victims). Antecedents of intention include attitudes towards the behaviour (e.g., positive attitudes towards rape), the social norms surrounding the behaviour (e.g., social influences that promote aggression towards women), and the individuals' perceived control in committing the behaviour (e.g., knowledge of offending). In sum, this model suggests that attitudes, through intentions, influence behaviour (see Figure 1).

Figure 1. Model of Ajzen's *Theory of Planned Behaviour*

Theoretical Relationship between Offence Supportive Cognitions and Rape

In addition to the theoretical relationship between attitudes and behaviour presented in the social psychology literature, the rape-related literature suggests that cognitions supportive of sexual offending play a role in the initiation and maintenance of sexually aggressive behaviour. For example, Ward's (2000) implicit theories model suggests that rapists hold offence supportive cognitions (i.e., implicit theories) that allow for the misinterpretation of women's intentions, beliefs, and behaviour, in a rape-facilitating manner (see Polascheck & Gannon, 2004; Polascheck & Ward, 2002 for applications of this theory specifically to rapists). Similarly, a number of researchers have suggested that the endorsement of rape myths is an important factor in the perpetration of sexual assault (Bumby, 1996; Burt, 1980; Lonsway & Fitzgerald, 1994). Generally this research supports the notion that offence supportive cognitions play a theoretical role in the commission of sexual assault.

A more comprehensive model that suggests offence supportive cognitions play a role in sexual assault is Hall and Hirschmann's (1991) *Quadripartite Model of Sexual Aggression Against Adults*. They suggest that physiological sexual arousal (e.g., sexual

arousal to rape), cognitions that justify sexual aggression (i.e., offence supportive attitudes), affective dyscontrol (e.g., anger), and personality problems (e.g., antisocial tendencies) are all factors that combine differently in rapists to promote sexual aggressive behaviour. In sum, it is suggested offence supportive cognitions are one factor that, when combined with other factors, result in sexual assault.

A second comprehensive model suggesting offence supportive cognitions play a role in sexual assault is Malamuth's *Confluence Model* (1986; Malamuth, Sockloskie, Koss, & Tanaka, 1991; see Gannon et al., 2008 for an overview). This model outlines two pathways that lead to sexual aggression; the *antisocial path/impersonal sex* path and the *hostile masculinity* path. In the antisocial path/impersonal sex path sexually aggressive behaviour stems from negative childhood environments (e.g., abusive home), early delinquent behaviour and impersonal sex, whereas in the hostile masculinity path sexually aggressive behaviour stems from offence supportive attitudes (e.g., attitudes accepting violence towards women), narcissism, and a need to sexually dominate women. Again, it is suggested that offence supportive cognitions are one factor that when combined with other factors promote sexually aggressive behaviour. Thus, the literature supports the notion that offence supportive cognitions play a theoretical role in perpetration of sexual assault.

Empirical Relationship between Offence Supportive Cognitions and Rape

Clearly offence supportive cognitions are theoretically important in models of sexual aggression, consequently several studies have examined the relationship between rape-related cognitions and sexual assault. As mentioned above, rape-related cognitions encompass rape myths, offence supportive beliefs, cognitive distortions, and attitudes

towards rape. Rape myths are defined in the literature as false attitudes and beliefs that serve to deny and justify sexual aggression against women (e.g., only sexually loose women are raped; Lonsway & Fitzgerald, 1994). Several studies have found that individuals who report a higher acceptance of rape myths also report a higher likelihood of committing rape (e.g., Bohner, Jarvis, Eyssel, & Siebler, 2005; Malamuth, 1981). Lanier (2001) found that sexually aggressive male teenagers endorsed significantly more rape myths than non-sexually aggressive male teenagers (Cohen's $d = 0.26$, 95% $CI = 0.12$ to 0.41) and that individuals who endorsed rape myths were 1.9 times more likely to commit future sexually aggressive acts (1 year later) than individuals who did not endorse rape myths (Odds Ratio [OR] = 1.9, 95% $CI = 1.46$ to 2.48). From these studies the relationship between the endorsement of rape myths and sexually aggressive behaviour is apparent (e.g., Bohner et al., 2005; Lanier, 2001; Malamuth, 1981).

Offence supportive beliefs have also been empirically linked to sexually aggressive behaviour. The term offence supportive beliefs includes *adversarial sexual beliefs* (i.e., the belief that sexual relationships are fundamentally exploitative; Burt, 1980), *acceptance of interpersonal violence* (i.e., that force and coercion are acceptable methods for gaining sex; Burt, 1980), *calloused sexual beliefs* (e.g., prick teasers should be raped; Mosher & Sirkin, 1984), and *hostility towards women* (e.g., women irritate me a great deal more than they are aware of; Check, Malamuth, Elias, & Barton, 1985). Bernat, Stolp, Calhoun, and Adams (1997) found calloused sexual beliefs and acceptance of interpersonal violence were significantly correlated with a date rape decision-latency measure (i.e., participants are asked to listen to a sexually coercive vignette and to stop the vignette when they think the perpetrator should stop the assault; $r = .38$ and $.20$

respectively). Forbes, Adams-Curtis, and White (2004) found that hostility towards women and adversarial sexual beliefs were significantly correlated with rape myth acceptance ($r = .43$ and $.40$ respectively) and that hostility towards women, adversarial sexual beliefs and rape myth acceptance were all moderately correlated with the use of sexual coercion ($r = .25$, $.24$, and $.25$ respectively; however none of these relationships reached significance). Furthermore, an extensive review of the relationships between different offence supportive beliefs, rape myth acceptance, and sexual aggression was conducted by Lonsway & Fitzgerald (1994) and generally, it was found that offence supportive beliefs were correlated with rape myth acceptance and that both were related to sexual aggression. Thus sexually aggressive individuals tend to endorse more offence supportive beliefs than non-sexually aggressive individuals, implying a relationship between offence supportive beliefs and sexually aggressive behaviour.

Similarly, rape-related cognitive distortions are empirically related to sexually aggressive behaviour. Rape-related cognitive distortions refers to assumptions, beliefs, and attitudes about rape that serve to deny, justify, minimize and rationalize rape-related behaviour (e.g., women who go to bars a lot are mainly looking to have sex; Bumby, 1996). Bumby (1996) found that rapists endorsed significantly more rape-related cognitive distortions than non-sex offenders. Similarly, Pervan and Hunter (2007) found rapists endorsed significantly more rape-related cognitive distortions than child molesters ($d = 0.42$) and a student sample ($d = 0.62$) and DeGue and DiLillo (2004) found that sexually coercive male college students endorsed significantly more rape-related cognitive distortions than non-coercive male college students ($d = 0.48$). Thus sexually aggressive individuals tend to endorse more rape-related cognitive distortions than non-

sexually aggressive individuals, suggesting a relationship between rape-related cognitive distortions and sexually aggressive behaviour.

With respect to attitudes towards rape, little is known about rapists' attitudes towards the act of rape. Previous research has examined non-rapists' attitudes towards rape and sexually coercive behaviour (e.g., Hermann, Emond, & Lysynchuk, 2009; Kennedy & Gorzalka, 2002; Maurer & Robinson 2007) and victims of rape (e.g., Anderson & Quinn, 2009; Mori, Bernat, Glenn, Selle, & Zarate 1995), as well as rapists' rape myth acceptance, offence supportive beliefs, and cognitive distortions. However, there has yet to be research examining how rapists evaluate rape (i.e., is rape good or bad, positive or negative). From the empirical evidence presented above, it would be expected that rapists would evaluate rape more positively than non-sex offenders.

Attitude Types

Implicit and Explicit Attitudes

To date, the theoretical models and empirical evidence presented above have referred to attitudes as a single construct. Contrary to this perception of attitudes, recent studies have found evidence of two different types of attitude (e.g. Gawronski & Bodenhausen, 2006; Greenwald & Farnham, 2000; Greenwald, McGhee, & Schwartz, 1998; McCarthy & Thompsen, 2006; Nosek & Smyth, 2007). These two different types of attitudes are referred to in the literature as *explicit attitudes* and *implicit attitudes*. Explicit attitudes refer to evaluations that are accessible through introspection and that are measured through self-report (Fazio & Olson, 2003). This accessibility makes explicit attitudes available for conscious self-report through mediums such as interviews and self-report questionnaires. Introspection can be problematic when assessing socially sensitive

topics (e.g., rape) because of the opportunity to answer in a socially desirable manner. Furthermore, empirical evidence suggests some attitudes may not be accessible through introspection, thus information may be missed if only explicit attitudes are assessed (Greenwald & Farnham, 2000; Nosek & Smyth, 2007). Implicit attitudes, however, refer to evaluations that are not accessible through introspection alleviating the problem of socially desirable responding (Fazio & Olson, 2003; Greenwald et al., 1998). Thus, when assessing attitudes towards a particular construct implicit attitudes can be assessed to complement explicit attitudes.

Empirical evidence supporting the notion of two different types of attitudes can be found in several recent studies (e.g., Greenwald et al., 1998; Greenwald & Farnham, 2000; Nosek & Smyth, 2007). Greenwald et al.'s (1998) experiment examining racial attitudes found that white participants' explicit attitude measures were not significantly correlated with measures of implicit attitude (mean $r = .14, p > .05$), suggesting the implicit measures were measuring a different type of attitude than the explicit measures. Furthermore, Greenwald and Farnham (2000) used confirmatory factor analysis to examine both implicit and explicit measures of self-esteem and found that implicit self-esteem measures were significantly correlated ($r = .43, p < .05$), that explicit self-esteem measures were significantly correlated ($r = .46, p < .05$), and that a two factor model, with one implicit and one explicit factor, significantly fit the data better than a single factor model. Similarly, Nosek and Smyth (2007) used confirmatory factor analysis to test several attitude models on a large data set containing several explicit and implicit attitude measures. Their results demonstrated that a two factor attitude model with one explicit factor and one implicit factor was superior to a single factor attitude model and that this

superiority held true when the variance associated with measurement method was accounted for. Consequently it has been theorized that there are two types of attitudes: explicit attitudes and implicit attitudes. To date, much of the rape-related literature has only focused on the explicit cognitions of rapists.

Implicit Attitudes towards Rape

As noted above, implicit attitudes are attitudes that are not accessible through introspection (Fazio & Olson, 2003; Greenwald et al., 1998). Often implicit attitudes are inferred using response latency (or reaction time) measures. One such measure that has been used extensively within the attitude literature and with offender populations is the *Implicit Association Test* ([IAT] Greenwald et al., 1998; e.g., Gray, Brown, MacCulloch, Smith, & Snowden, 2005; Nunes, Firestone, & Baldwin, 2007).

Implicit Association Test (IAT).

IAT measures are computer based tasks that use response latencies to measure the implicit associations between two concept (e.g., *rape* and *consenting sex*) and two attribute (e.g., *positive* and *negative*) categories. The IAT procedure has been used in a variety of research contexts, including studies examining self-esteem (e.g. Greenwald & Farnham, 2000), self-concepts (e.g. Asendorpf, Banse, & Mucke, 2002), sexual orientation (e.g. Jellison, McConnell, & Gabriel, 2004), violence (e.g. Snowden, Gray, Smith, Morris, MacCulloch, 2004), and sexual deviance (e.g. Gray, Brown, MacCulloch, Smith, Snowden, 2005; Mihailides, Devilly, & Ward, 2004; Nunes, Firestone, Baldwin, 2007).

The basic task participants are asked to complete when administered an IAT measure is to classify selected words into their respective concept or attribute categories

using two buttons on a computer keyboard (e.g., *d* and *k*; Greenwald et al., 1998). The time it takes for the participant to classify the word correctly is known as the response latency. There are two main components of the basic IAT task; the first type is a single category practice trial. For the single category practice trials each of the buttons on the keyboard represents a single concept or attribute category (e.g., *d* represents *rape* and *k* represents *consenting sex* or *d* represents *positive* and *k* represents *negative*). Words representative of each category are presented on the screen and the participant must categorize the words using two keyboard buttons (Greenwald et al., 1998). The second type of task is the combined task, for these trials each of the buttons represents a target concept and attribute category pair (e.g., *d* represents *rape* and *positive* and *k* represents *consenting sex* and *negative*). Words representative of one of the four possible categories are presented on the screen, participants are asked to categorize the words using two keyboard buttons (see Figure 2; Greenwald et al., 1998). When a concept and attribute category pair are more compatible for a participant (i.e., associated) and share a response key, the participant will respond more quickly and with less error than when a less compatible concept and attribute category pair share a response key (Greenwald et al., 1998). For example, an individual who associates *rape* with *positive* more so than *rape* with *negative* will respond more quickly when the *rape* and *positive* categories share the same response key. From average response latencies for each type of combined task (i.e., more compatible and less compatible) a difference score can be calculated that allows researchers to make inferences about participants' implicit associations.

Figure 2. An Example of an IAT Measure Adapted to Assess Attitudes Towards Rape.

Reliability of the IAT.

Internal and test-retest reliability.

Studies examining the reliability of the IAT procedure have found it to be a reliable measure of implicit associations (e.g. Bosson, Swann, & Pennebaker, 2000; Cunningham, Preacher, & Banaji, 2001; Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005; Lane, Banaji, Nosek, & Greenwald, 2007). In a recent meta-analysis, Hofmann et al. (2005) found a mean internal reliability correlation of .79 for a total of 50 studies (i.e., internal consistency scores and split-half reliability scores) and a mean test-retest reliability correlation of 0.51 for 11 studies. Furthermore, Lane et al. (2007) examined the test-retest reliability for 20 IAT studies and found they ranged from 0.25 to 0.69, with a mean and median score of 0.50. Thus, the IAT procedure tends to have good internal consistency and moderate test-retest reliability.

Validity of the IAT.

Convergent validity.

Hofmann et al. (2005) recently conducted a meta-analysis examining the relationship between explicit self-report measures and IAT measures. Their review of 126

studies resulted in a moderate mean correlation of .24 ($n = 12,289$) when measurement error was corrected for, suggesting explicit self-report measures and IAT measures assess similar but distinct constructs. Additionally, this meta-analysis found that the relationship between explicit self-report measures and IAT measures was moderated by response spontaneity and conceptual correspondence between explicit and implicit measures. Particularly, as the spontaneity of self-report measures increased and the conceptual correspondence between self-reports and IAT measures increased, correlations between explicit self-report measures and IAT measures systematically increased. The relationship described in Hofmann et al. (2005) between moderator variables and the strength of correlations between explicit self-report measures and IAT measures is consistent with the previously discussed notion that explicit and implicit attitude measures are two distinct but related attitude constructs.

Discriminant validity.

Evidence of discriminant validity was also found in the meta-analysis conducted by Hofmann et al. (2005). Ten studies that correlated non-corresponding explicit self-report measures and IAT measures were reviewed. An average correlation of .03 ($n = 1,162$) was obtained. These findings suggest that IAT measures and explicit self-report measures that assess different psychological constructs are unrelated. Thus, it is concluded that IAT measures have good discriminant validity.

Known-groups validity.

In Greenwald et al. (1998 [Experiment 2]) evidence of known-groups validity emerges in their study of racial preference for Japanese and Korean Americans. The results demonstrated that when both Japanese and Korean Americans were administered

a racial preference IAT (Japanese or Korean), both groups had a stronger preference for their own culture relative to the other. Similarly, when studying masculinity-femininity self-concept Greenwald and Farnham (2000) found that males more strongly associated themselves with masculinity and the reverse was true for females. From these results, it is suggested that IAT measures have good known-groups validity.

Predictive validity.

Greenwald, Poehlman, Uhlmann, & Banaji (2009) conducted a meta-analysis examining the predictive validity of IAT measures. Specifically, the authors were examining, on average, how well IAT measure predicted criterion other than scores on implicit or explicit measures of the same psychological construct (e.g., physical actions, physiological responses, or preferences expressed as choice). After reviewing 184 independent samples, a mean correlation of .27 was found, suggesting that IAT measures are moderately correlated with predicted criteria. Interestingly, this study found that as the social sensitivity of the psychological construct being measured increased, the predictive validity of explicit measures decreased while IAT measures' predictive validity did not significantly decrease. In addition to providing evidence of IAT measures' predictive validity, these findings support the notion that IAT measures are resistant to socially desirable responding.

IAT measures adapted to assess attitudes towards rape.

To date, only one study has adapted the IAT procedure to measure implicit attitudes towards rape (Nunes, Ratcliffe, Babchishin, & Kessous, 2008). Nunes et al. asked 46 heterosexual male undergraduate students to complete a Rape Evaluation IAT that consisted of rape versus non-rape target concept categories and good versus bad

attribute categories. In addition to the IAT measure, participants were asked to complete an explicit measure of attitudes towards rape (i.e., the *Rape Outcome Expectancies [ROE] Scale*), the *Sexual Experiences Survey-Male Version* (a measure of previous use of sexual coercion [SES-MV]; Koss & Oros, 1982), the *Likelihood to Rape scale* (proclivity to rape [LR]; Malamuth, 1981), and the *Balanced Inventory of Desirable Responding* (a measure of socially desirable responding [BIDR]; Paulhus, 1984).

Nunes et al. (2008) found that participants who had been sexually coercive in the past (i.e., a score of 3+ on the SES-MV) had significantly less negative implicit attitudes towards rape than participants who had never been sexually coercive (i.e., a score of zero on the SES-MV; $d = 1.34$, 95% $CI = 0.41$ to 2.27). Similarly, it was found that participants who reported a higher likelihood of committing rape (i.e., a score of 3+ on the LR scale) had significantly less negative implicit attitudes towards rape than participants who reported they were not at all likely to commit rape (i.e., a score of 1 on the LR scale; $d = 1.37$, 95% $CI = 0.37$ to 2.36). Furthermore, the Rape Evaluation IAT was significantly correlated with both the use of sexual coercion and proclivity to rape (i.e., SES-MV and LR scales; $r = .35$, $p < .05$; $r = .41$, $p < .05$ respectively). Similar trends were also found when examining explicit attitudes towards rape (i.e., the ROE scale), although they did not reach significance. These results suggest the IAT method can be adapted to assess implicit attitudes towards rape. In the published literature to date, an IAT assessing attitudes towards rape has not been used with incarcerated rapist populations. Thus, it is unknown how incarcerated rapists implicitly evaluate rape.

Attitudes and Sexual Arousal

Sexual Arousal as a Motivational State

Sexual arousal is widely acknowledged as a motivational state. In the literature it is defined as a motivational state comprised of both psychological desire and physiological arousal that is the result of encountering some sort of stimulus (i.e., thoughts, objects, situations; Reeve, 2005, p.90). Theoretically physiological needs, such as sex, promote psychological drive. Psychological drive, then, energizes the individual and readies them to engage in goal-directed behaviour. The individual then engages in goal-directed behaviour and, if successful, the physiological need is satisfied (Reeve, 2005). Due to the motivational factors behind sexual arousal, when presented with an opportunistic situation it would seem natural for a sexually aroused individual to pursue sex. From this it is suggested that the psychological drive resulting from sexual arousal may influence rape-related cognitions.

In Loewenstein (1996) it is suggested that sexual arousal is an influential state that effects cognitive processing in three ways: (1) by narrowing attention towards the aroused state, (2) by skewing perceptions of time so the individual is motivated to resolve the aroused state quickly, and (3) by impairing rational thinking; making self-centered goals more important than long-term consequences. From this, it is suggested that sexual arousal may narrow an individual's focus towards being sexually aroused, that the individual will be motivated to satisfy the sexual desire quickly, and that satisfying the sexual desire will trump the needs or concerns of others. Thus, it is believed that these changes in attention, perceptions of time, and rational thinking may potentially change rape-related cognitions.

Sexual Arousal and Theories of Rape

Above the motivating effects of sexual arousal are discussed in a general context, in the rape-related literature the role of sexual arousal in sexual assault is also discussed. There are three theoretical models of sexual offending that incorporate sexual arousal in the offence process. The first is the *Social Information-Processing Dysfunction model*. The basic premise underlying this model is that sexual arousal promotes sexually aggressive behaviour by altering information processing (see Stinson et al., 2008 for an overview). Generally, this model posits that the social information processes of sex offenders differ from those of non-sex offenders and that as sexual arousal and affective states change so do the information-processes (Johnston & Ward, 1996; Ward, Hudson, Johnston, & Marshall, 1997). Specifically, it is believed that previously held beliefs, attitudes and cognitive schemas coupled with motivational factors determine what information is perceived and that when limited cognitive resources are available (e.g., when sexually aroused) these previously held attitudes, beliefs and cognitive schemas are relied upon more heavily. Thus, if an individual has more positive attitudes towards rape and is sexually aroused these attitudes may influence their actions more so than when they are not aroused.

Marshall and Barbaree's (1990) *Integrated Theory of Sex Offending* is the second model that suggests sexual arousal may promote sexually aggressive behaviour. Specifically, they suggest that transitory situational factors such as sexual arousal, the use of alcohol, or anger towards women, promotes sexually aggressive behaviour by disinhibiting the prosocial controls an individual has that prevent rape. This disinhibition

coupled with biological factors, negative childhood environments, and sociocultural contexts promotes sexually aggressive behaviour.

The *Self-Regulation Model of Sex Offending* proposed by Ward and colleagues (Ward & Hudson, 1998; Ward & Hudson, 2000; Yates & Kingston, 2006) is the third model. Here it is theorized that offenders are either approach or avoidant goal orientated; approach goal orientated offenders have pro-offending goals (i.e., goals that facilitate sexual offending), whereas avoidant goal orientated offenders aim to avoid committing sexual offences. In addition to goal orientation, a distinction is made between offenders who actively pursue their offending goals and those who passively pursue their offending goals. Combined, these different types of goal orientation and goal pursuit result in four different offence pathways.

For the avoidant goal oriented offenders, the first offence pathway is *avoidant-passive*. These offenders want to avoid sexual offending but are passive in their goal pursuit (i.e., they do nothing to prevent reoffending); once they become sexually aroused they are disinhibited and reoffend. The *avoidant-active* pathway is the second; these offenders also want to avoid sexual offending, but to do so they employ ineffective coping strategies (i.e., substance abuse) to control sexual arousal, which in turn leads to a loss of control and reoffending. In sum, once sexually aroused offenders from both passive and active avoidant pathways switch to an approach goal orientation and reoffend.

For the approach goal orientated offenders, the first pathway is the *approach-passive* pathway (a.k.a., approach-automatic pathway). These offenders want to sexually offend but do not do so until situational factors are conducive to sexual offending. It is

suggested that the approach-passive offenders' automatic cognitive schemas and sexual scripts are activated by situational primes, such as sexual arousal that results from the close proximity of a victim, and this leads to sexually aggressive behaviour. The second approach pathway is the *approach-active* pathway (a.k.a., approach-explicit pathway), these offenders also want to sexually offend and actively plan and carry out sexual offences. Thus, sexual arousal also influences the commission of sexual offences in one of the two approach offence pathways. From these models it is suggested sexual arousal influences the rape-related cognitions that offenders have and plays a role in the commission of sexually aggressive behaviour.

Sexual Arousal and Explicit Attitudes towards Rape

To date, the influence of sexual arousal on explicit attitudes towards rape has not been examined in the literature. However, Bouffard (2002) examined the effect of sexual arousal on the salience, value, and certainty of costs and benefits associated with sexual assault and found self-reported sexual arousal was significantly correlated with the salience of sexual pleasure ($r = .25, p < .01$). These findings suggest that sexual pleasure becomes more important when sexually aroused. Furthermore, multiple regression was used to examine the impact of sexual arousal, associated costs and benefits, rape myth acceptance, and demographic variables on the likelihood of being sexually coercive. They found that when the associated benefits were not included in the linear model sexual arousal significantly predicted the likelihood of sexual coercion, whereas when the salience of the associated benefits was included sexual arousal became non-significant and salience of the associated benefits became a significant predictor. These findings suggest that the effect of sexual arousal on the likelihood of being sexually coercive is

mediated by the importance of the associated benefits of sexual assault. Thus, the influence of sexual arousal on sexually aggressive behaviour may depend on evaluations of the associated benefits of sexual assault.

Additionally, sexual arousal has been linked with increases in the reported likelihood of using sexually coercive behaviour. Research has found that sexually aroused male undergraduate students reported they were more likely to use sexually coercive behaviours than non-aroused participants (Ariely & Loewenstein, 2006; Loewenstein, Nagin, & Paternoster, 1997). Similarly, Bouffard (2002) found that male undergraduate students' self-reported level of sexual arousal correlated significantly with their reported likelihood of using sexually coercive behaviour ($r = .20$, $p < .05$). These results suggest that sexual arousal influences intentions of using sexually coercive behaviour. According to Ajzen's *Theory of Planned Behaviour*, intentions are a product of attitudes, social norms, and perceived control over a situation. Thus, it is possible that participants' intentions to use sexually coercive behaviour change because their attitudes towards sexually coercive behaviour become more positive.

The studies presented above seem to suggest all men are affected by sexual arousal in a similar manner. However, it is important to note that these studies did not control for a history of sexual aggression. It is possible that sexually aroused participants, on a whole, reported a higher likelihood of using sexually coercive behaviour to obtain sex because some participants had a history of sexual aggression. Relatedly, some research has found no differences between experimentally manipulated sexually aroused and non-sexually aroused groups (Bouffard, 2002); again this could be the result of not controlling for a history of sexual aggression. Thus, it is unknown whether sexual arousal

only affects men with a history of sexual aggression or if affects all sexually aroused men.

Sexual Arousal and Implicit Attitudes towards Rape

To date, the effect of sexual arousal on rapists' implicit attitudes towards rape has not been examined. However, recent research has shown that implicit attitudes can be context dependent (e.g., Barden, Maddux, Petty, & Brewer, 2004; Dasgupta & Greenwald, 2001; Lowery, Hardin, and Sinclair (2001); Mitchell, Banaji, & Nosek, 2003; Wittenbrink, Judd, & Park, 2001). For example, research has shown that implicit attitudes change depending on the context stimuli in which they are evaluated. In Mitchell et al. (Experiment 1; 2003) participants preferred black exemplars to white exemplars when the categorization task emphasized occupation (athletes vs. politicians; $d = -0.74, p < .001$), whereas, when the categorization task emphasized race (black vs. white) white exemplars were preferred to black exemplars ($d = 0.31, p < .01$). Furthermore, Mitchell et al. (Experiment 4) found implicit attitudes changed depending on what aspects of the attitude object were more or less salient. For example, if a black female was the attitude object and she was presented in the context of males then gender would become more salient and the implicit attitude would reflect attitudes towards gender. However, if the black female was presented in the context of white females then race would become more salient and the implicit attitude would reflect attitudes towards race. Therefore, the context of the attitude object impacts the implicit attitudes that one has towards a specific attitude object.

Interestingly, Ferguson and Bargh (2004) suggest that individuals in motivated states perceive goal enabling information more readily than goal disabling information

and that goal facilitating information results in more positive evaluations of goal related attitude objects than unrelated or goal disabling attitudes objects. In support of this hypothesis, they found that when participants were pursuing a goal (i.e., were playing a game; were thirsty) they had more positive attitudes towards goal oriented stimuli relative to unrelated stimuli. These results suggest that motivational states (e.g., thirst) influence implicit attitudes towards goal related stimuli. Similarly, Seibt, Hafner, and Deutsch (2007) found hungry individuals had more positive attitudes towards food stimuli than satiated individuals. From this research, it is suggested that motivational states (e.g., thirst and hunger) lead to more positive implicit attitudes towards goal related stimuli relative to unrelated or disabling goal stimuli. It is possible that sexually aggressive men find rape-related stimuli more relevant to their goals than non-sexually aggressive men. Thus, it is hypothesized that rape-related stimuli may be perceived more positively when in a sexual aroused state by sexually aggressive men.

The above research suggests that implicit attitudes are context dependent; however recent research has demonstrated that this is not always true. Rydell and Gawronski (2009) theorize that implicit attitudes are only context dependent when prior evaluations are heterogeneous. They suggest heterogeneity in prior evaluations results from heterogeneity in prior experiences with the attitude object. It is argued that each new experience with the attitude object, whether consistent or inconsistent with prior experiences, is added to the existing attitude representation. Context cues and the learned relationship between context cues and valence then determine how the attitude object is implicitly evaluated. It is theorized that implicit attitudes are context independent when prior evaluations are homogeneous. In order to fully understand the impact of context on

implicit attitudes Rydell and Gawronski (2009) conducted four experiments. The results of all of the experiments supported the notion that implicit attitudes were context dependent when prior experiences with the attitudes object were heterogeneous and were context independent when prior experiences were homogeneous. Furthermore, the results suggested that when the situation was novel, individuals relied upon the information acquired first irrespective of whether the information was positive or negative. These findings suggest that individuals who consistently evaluate rape less negatively relative to consenting sex or who consistently evaluate rape more negatively relative to consenting sex may not be influenced by sexual arousal, but those who evaluate rape heterogeneously may be influenced by sexual arousal. For example, an offender who has had some positive experiences with rape (i.e., sexual gratification) and who has had some negative experiences with rape (i.e., feels remorse) would evaluate rape heterogeneously. Depending on the context, the offender may rely more heavily on the positive experiences or the negative experiences when implicitly evaluating rape. Thus, for offenders who evaluate rape heterogeneously context, such as a sexually arousing situation, may change implicit evaluations of rape.

Conclusion

The purpose of the current study is to examine the influence of sexual arousal on incarcerated rapists' implicit and explicit attitudes towards rape. From the above literature review it is clear that offence supportive cognitions are theoretically and empirically important in the commission of sexually aggressive behaviour. It has been pointed out above that there are two distinct types of attitudes one can have; implicit attitudes and explicit attitudes. To date, the literature has primarily focused on the explicit

rape-related cognitions of sexually aggressive individuals. The motivating forces and theoretical role of sexual arousal in sexually aggressive behaviour has also been discussed and it has been suggested that sexual arousal may change both implicit and explicit attitudes towards rape. It is noted, however, that any change in attitudes as a result of being sexually aroused may be dependent upon individuals' prior rape-related cognitions and the heterogeneity of previous sexual experiences. In sum, the following study will examine the influence of sexual arousal on both incarcerated rapists' and non-sex offenders' attitudes towards rape.

Research Hypotheses

It is expected that rapists' implicit and explicit attitudes towards rape will be more positive when they are sexually aroused than when they are not sexually aroused.

Previous research has found that sexually aggressive individuals tend to endorse more rape-related cognitions than other populations and has found that sexually aggressive male students implicitly evaluate rape less negatively than non-sexually aggressive male students. These findings suggest that sexually aggressive individuals may associate rape with positive concepts in memory. As sexual arousal focuses attention and drives the individual to satisfy their sexual need the individual may rely more heavily on the automatic processing of incoming information. The automatic processing may then rely on the memories that view rape as a positive behaviour, making the attitudes of sexually aroused rapists more positive than non-sexually aroused rapists.

This notion is supported by the research that found sexually aroused individuals reported they were more likely to engage in sexually coercive behaviour than non-sexually aroused individuals (Ariely & Loewenstein, 2006; Loewenstein, et al. 1997). It

is believed that the self-reported intentions of sexually aroused individuals may change because they evaluate rape more positively in a sexually aroused state. Furthermore, the empirical evidence that suggests implicit attitudes can be influenced by context and motivational states suggests that sexual arousal may change rapists' implicit attitudes towards rape.

It is unknown how sexual arousal will influence non-sex offenders' implicit and explicit attitudes towards rape. The previous research examining the influence of sexual arousal on self-reported likelihood of engaging in sexually coercive behaviour has not controlled for a history of sexually aggressive behaviour. Therefore, it is unknown whether the sexually aroused group reported a greater likelihood of engaging in sexually aggressive behaviour because of the influence of sexual arousal or because they had a history of sexual aggression.

Method

Pilot Testing

Purpose.

To ensure the measures of attitudes towards rape were assessing the desired constructs, pilot testing was conducted to assess the relationship between the proposed measures of attitudes towards rape and measures of sexually aggressive behaviour. The pilot testing also provided an opportunity to gain feedback from participants on the measures of attitudes toward rape and the testing procedure.

Participants.

Participants were 37 male undergraduate students recruited through SONA from Carleton University. The 64.90% of participants were 18 to 19 years old, 32.40% were 20

to 24 years old, and 2.70% were 25 to 29 years old. With regards to ability to understand English, all participants reported that they could understand both written and spoken English.

Measures.

Rape Evaluation Implicit Association Test (RE-IAT).

The RE-IAT is a measure that is based on the Implicit Association Test (IAT) procedure (Greenwald et al., 1998). The RE- IAT has been constructed to measure the implicit associations between the target concepts of rape and consenting sex and the attributes positive and negative. The words selected were used in a previous study examining implicit attitudes towards rape (see Table 1 for words used in the RE-IAT; Malcom et al., 2009).

Table 1

RE-IAT Words Used in Malcom et al. (2009)

<i>Rape</i>	<i>Consenting Sex</i>	<i>Positive</i>	<i>Negative</i>
Force	Consent	Vacation	Rotten
Violent	Mutual	Rainbow	Poison
Rape	Willing	Smile	Sickness
Violate	Permission	Sunshine	Vomit
Assault	Agreement	Paradise	Cancer
		Freedom	Evil

The order and content of the RE-IAT blocks is presented in Table 2. When constructing this IAT the block order and number of trials recommended in Nosek, Greenwald, and Banaji (2007) was followed. In total, the RE-IAT consists of seven

blocks. Each of these blocks involves the classification of either exclusively target concept words (e.g., *rape* words or *consenting sex* words), exclusively target attribute words (e.g., *positive* words or *negative* words), or both target concept and attribute words (i.e., the combined tasks). Each block contains a specific number of trials, where a trial is defined as the classification of one word into the appropriate category. Some of the trials serve as practice trials, allowing the participant time to get used to the stimuli and sorting rules, others are considered critical trials (i.e., the combined tasks) and are used for the scoring of the IAT.

The IAT contains four blocks of critical trials that are used when scoring the IAT. The blocks differ by which target concept (e.g., *rape* and *consenting sex*) and target attribute (e.g., *positive* and *negative*) are paired. Two of the four critical blocks contain pairings that would be less compatible for participants (i.e., relative to the other two pairs) who associate rape and positive categories together (e.g., *rape* paired with *negative*, *consenting sex* paired with *positive*). The other two blocks contain pairings that would be more compatible for participants who associate rape and positive categories together (e.g., *rape* paired with *positive*, *consenting sex* paired with *negative*). When completing less compatible critical block trials, participants respond more slowly and with more error compared to the completion of more compatible critical block trials (Greenwald et al., 1998). Thus, the difference between the two types of critical blocks (e.g., those that pair *rape* with *positive* and *consenting sex* with *negative* versus those that pair *rape* with *negative* and *consenting sex* with *positive*) indicates which critical block trials are more compatible for the participants. Higher scores on the RE-IAT represent more positive attitudes towards rape.

Table 2

RE-IAT Trial Blocks (Nosek, Greenwald, & Banaji, 2007)

Block	Number of Trials	Left Key Categories	Right Key
		Categories	
B1	20	<i>Rape</i>	<i>Consenting Sex</i>
B2	20	<i>Positive</i>	<i>Negative</i>
B3	20	<i>Rape and</i>	<i>Consenting Sex and</i>
		<i>Positive</i>	<i>Negative</i>
B4	40	<i>Rape and</i>	<i>Consenting Sex and</i>
		<i>Positive</i>	<i>Negative</i>
B5	40	<i>Consenting Sex</i>	<i>Rape</i>
B6	20	<i>Consenting Sex and</i>	<i>Rape and</i>
		<i>Positive</i>	<i>Negative</i>
B7	40	<i>Consenting Sex and</i>	<i>Rape and</i>
		<i>Positive</i>	<i>Negative</i>

Note. Blocks 3 and 4 are counterbalanced with Blocks 6 and 7 and Blocks 1 and 5 are counterbalanced with each other, between participants.

Although the psychometric properties of the IAT procedure have been examined thoroughly, little is known about the psychometric properties of IAT measures adapted to assess attitudes towards rape. To date there is only one study that provides some evidence of the validity of IAT measures adapted to assess attitudes towards rape. Nunes et al. (2008) found that an IAT adapted to assess attitudes towards rape significantly differentiated between sexually coercive and non-coercive male college students (i.e., a score equal to or greater than three vs. a score of zero on the Sexual Experience Survey –

Male Version; Koss & Oros, 1982; $d = 1.34$, 95% $CI = 0.41$ to 2.27). As well that the same IAT measure significantly differentiated between male college students who responded that they were more likely to commit rape if they would not get caught and punished than those who responded that they would not commit rape even if they would not get caught or punished (i.e., a score equal to or greater three vs. a score of one on the Likelihood to Rape Scale; Malamuth, 1981; $d = 1.37$, 95% $CI = 0.37$ to 2.36).

Additionally, the IAT measure adapted to assess attitudes towards rape was positively correlated with the Sexual Experience Survey – Male Version (Koss & Oros, 1982; $r = .35$, $p < .05$) and the Likelihood to Rape Scale (Malamuth, 1981; $r = .41$, $p < .05$)

suggesting the IAT was measuring a construct related to sexually coercive behaviour.

The IAT measure adapted to assess attitudes towards rape was also correlated with a self report measure of attitudes towards rape ($r = .37$, $p < .05$), suggesting both measures are measuring similar constructs. The IAT adapted to assess attitudes towards rape was also not significantly related to the Balanced Inventory of Socially Desirable Responding (BIDR; Paulhus, 1984; BIDR- IM scale $r = -.02$, BIDR-SD scale $r = -.23$), suggesting this measure is not affected by socially desirable responding. These findings suggest that an IAT adapted to assess attitudes towards rape is a valid measure of attitudes towards rape.

The Bumby RAPE Scale.

The Bumby RAPE Scale (Bumby, 1996) is a self-report measure consisting of 36 statements reflective of rape related cognitive distortions (e.g., *women who get raped probably deserved it*). For each statement, participants were asked to rate how much they agree with the statement on a four point Likert scale (1 *Strongly Disagree* to 4 *Strongly*

Agree). The responses were then summed and higher scores indicate a higher acceptance of rape related cognitive distortions (Bumby, 1996; Appendix B).

The 36 items were derived from the author's clinical and research experiences with sex offenders and Burt's Rape Myth Scale (Burt, 1980). The reliability of the measure was tested by examining the item-to-total correlations, the internal consistency, and the test-retest reliability. Corrected item-to-total analyses were conducted on all 36 items; every item had an item-to-total correlation of above .30 with a mean score of .65. Chronbach's alpha was .96, suggesting excellent internal consistency (Robinson, Shaver, & Wrightsman, 1991) and the test-retest correlation was .86 over a two week interval, suggesting the test-retest reliability is adequate (Bumby, 1996).

The validity of the RAPE scale was also examined by Bumby (1996). To assess convergent validity, the RAPE scale was correlated with several other measures of rape related cognitive distortions. Bumby (1996) found that the RAPE scale was significantly correlated with the Cognitive Distortions/ Immaturity and Justification scales of the Multiphasic Sex Inventory (Nichols & Molinder, 1984) ($r = .33, p < .05$, $r = .34, p < .05$), suggesting the RAPE scale measured a similar construct.

To assess the potential effects of socially desirable responding, the relationship between the RAPE scale and the Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960) was examined. The Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960) was not significantly correlated with the RAPE scale, suggesting it is not significantly affected by socially desirable responding (Bumby, 1996).

Known groups validity was assessed by examining group differences between rapists, child molesters, and non-sex offenders. Rapists endorsed significantly more

cognitive distortions on the RAPE scale compared to non-sex offenders and endorsed more cognitive distortions than child molesters, although this relationship did not reach significance (Bumby, 1996). Similarly, DeGue and DiLillo (2004) found that sexually coercive male college students endorsed significantly more cognitive distortions on the RAPE scale than non-coercive male college students.

Semantic Differential Measures of Evaluations of Rape and Consenting Sex.

The semantic differential measures of evaluations of rape and consenting sex (SD-RCS) are self-report measures that ask participants to rate both rape and consenting sex on seven bipolar scales: bad to good, not fun to fun, unpleasant to pleasant, wrong to right, immoral to moral, enjoyable to not enjoyable, and positive to negative, using a six point Likert scale (e.g., -3 *Bad/Not Fun/Unpleasant/Wrong/Immoral/Not Enjoyable/Negative* to +3 *Good/Fun/Pleasant/Right /Moral/Enjoyable/Positive*; Appendix C). A total score was then calculated from these ratings. First, the scales evaluating rape were averaged, creating a rape mean score (SD Rape). Second, the scales evaluating consenting sex were averaged, creating a consenting sex mean score (SD Consenting Sex). The consenting sex mean score was then subtracted from the rape mean score creating a difference score, similar to that obtained from the RE-IAT, where positive scores indicate more positive explicit attitudes towards rape relative to consenting sex. Similar measures have been used in previous IAT research (e.g. Greenwald et al. 1998; Malcom et al., 2009).

Coercive Sexuality Scale.

The coercive sexuality scale (CSS; Rapaport & Burkhart, 1984; Appendix J) was used to assess participants' prior sexually coercive behaviour. Participants were asked to

answer 19 questions about the variety and frequency of sexually coercive behaviours that they have engaged in. For each question, participants could respond that they had engaged in the behaviour never (score of 0) to nine times or more (score of 9). A total score was then calculated by summing the responses. Higher total scores indicate higher rates of previous sexually coercive behaviour.

Likelihood to Rape Scale.

The Likelihood to Rape Scale (Appendix K; Malamuth, 1981) is a single question that asks participants if they would commit rape if they knew that they would not be caught or punished. Participants respond on a five point Likert scale (1 *Not at all Likely* to 5 *Very Likely*).

Sexual Coercion Analogue.

This criterion measure was designed to assess participants' willingness to commit sexually coercive behaviour (Appendix L). Participants read a narrative that describes the participant (second-person "you") and a woman interacting. The interaction is friendly at first, but becomes increasingly coercive. At various stages throughout the narrative, the participant was given the option to accept the woman's refusals and leave her alone or to persist with increasing levels of sexual coercion. A total score was calculated by summing the number of times a participant chose to persist using sexually coercive behaviours. Total scores can range from zero to seven, with higher scores indicating participants were more willing to engage in sexually coercive behaviour.

Rape Outcome Expectancies Scale.

The Rape Outcome Expectancies (ROE) scale was used to assess explicit evaluations of rape (Nunes, et al. 2008; Appendix M). Participants were asked to provide

three outcomes of rape, rate how likely each outcome is to happen on a seven point Likert scale (0 *Never Happen* to 6 *Guaranteed to Happen*), and rate the valence of each outcome on a seven point Likert scale (-3 *Very Negative*, 0 *Neutral*, 3 *Very Positive*). From these rating two different scores were calculated; a rape outcome evaluation score and a total score. The rape outcome evaluation score was calculated by summing the valence rating for each outcome, more positive scores indicate more positive outcomes of rape. The total score was calculated by summing the product of the likelihood rating and the valence rating for each outcome, more positive scores indicate more positive evaluations of the expected outcomes of rape.

Procedure

The measures were pilot tested with 37 male undergraduate students recruited through SONA from Carleton University. Once the participant agreed to meet, the researcher verbally explained the testing procedure, confidentiality, and the limits to confidentiality and asked the participant to read and sign two copies of the consent form (Appendix G). Participants were then asked to complete the, RE-IAT, SD-RCS (Appendix C), ROE scale (Appendix M), and Bumby Rape scale (Appendix B). The RE-IAT and self report measures were counterbalanced between participants, but the three self-report measures were always presented in the same order. The participants were then asked to complete the CSS (Appendix J), LR scale (Appendix K), Sexual Coercion Analogue (Appendix L), and the age, language, and education questions from the Background Questionnaire (Appendix A). Following the completion of the measures, participants were thanked and debriefed.

Study Proper**Participants.**

24 rapists and 12 non-sex offenders completed the study proper. For the purposes of this study, participants were classified as rapists if they had an index or prior offence that was a sexual crime against a female victim equal to or over the age of 16 (e.g., sexual assault sec. 271.1 of the Criminal Code of Canada; CCC), or if they had an offence that was not a sexual offence, but was sexually motivated and had a female victim equal to or over the age of 16 (e.g., an offender convicted of murder who also sexually assaulted the victim). Participants were classified as non-sex offenders if their index offences were not sex offences and were not sexually motivated, if they had no prior charges or convictions for sex offences or sexually motivated offences, and if they had no self-reported sex offences.

The victim cut-off age of 16 was selected for two reasons; the first being that this victim age cut-off has been used in previous research on rape (e.g., Lalumiere & Quinsey, 1994; Rice, Chaplin, Harris, & Coutts, 1994). Second, victims who have reached the age of 16 have most likely started puberty, making it hard to confuse victims of this age with pre-pubescent children (i.e., 90% of females had started puberty by ages 12-13; Sun et al., 2005). Thus, this cut-off age helped ensure that sex offenders who assault adults, and not sex offenders who abuse children, were studied.

Measures.

The RE-IAT, Bumby RAPE Scale (Appendix B), and SD-RCS (Appendix C), were administered in addition to the measures described below (for measure descriptions refer to pilot testing).

Background Questionnaire.

The background questionnaire asked participants about their offence related history, ability to speak and understand English, sexual preferences, likelihood to rape if they would not get caught, and demographic information (i.e., LR Scale; Appendix A). The information collected was used to examine potential differences between the groups and to examine potential relationships between variables.

Manipulations.***Sexual Arousal Story.***

The sexual arousal story is an audio recording of an erotic story (i.e., an adapted Penthouse Letter, 2008; Appendix E). The sexual arousal story was recorded by a female not involved in the research project. The recording described consensual sex between a female and male and included kissing, oral sex and vaginal intercourse. The participant listened to the recording through a pair of headphones attached to a laptop computer.

Neutral Story.

The neutral story is an audio recording of a man's trip to the grocery store (Appendix F). This condition acts as the control condition in this study. The neutral story was recorded by a male not involved in the research project. The participant listened to the recording through a pair of headphones attached to a laptop computer.

Manipulation Check.

In order to test the effectiveness of the sexual arousal and neutral conditions a manipulation check was administered (Appendix D). This consisted of several five point Likert scale questions that asked the participant a variety of questions regarding how sexually arousing the story was, how sexually aroused they were when completing the

measures following the arousal manipulation, if they felt distressed by the story, and how often they used to watch pornographic movies. Additionally, one question asked what the story was about, to ensure the participant listened to the arousal or non-arousal story.

Coding Manual.

Institutional files (e.g., criminal record, psychological assessment, intake assessment) were reviewed to obtain offence related (e.g., criminal history, number of victims), assessment related (e.g., Static-99), and demographic information (e.g., race, level of education completed). The file review was guided by a coding manual (Appendix N).

Procedure.

The study proper was conducted on rapists ($n = 24$) and non-sex offenders ($n = 12$) recruited from federal correctional institutions in Kingston, Ontario and the surrounding area (Kingston Penitentiary and Regional Treatment Center; Millhaven Institution; and Warkworth Institution), as well as the Mental Health Centre Penetanguishene. If a participant agreed to meet, the researcher verbally explained the testing procedure, confidentiality, and the limits to confidentiality and asked the participant to read and sign two copies of the consent form (Appendix G). Once informed consent was obtained, the participant was asked to complete the background questionnaire (Appendix A). Next, the participant was asked to complete the RE-IAT, Bumby RAPE scale (Appendix B), and the SD-RCS (Appendix C). Following the completion of the above measures, the participant was randomly assigned to either the sexual arousal or control condition (Stories Appendices E & F). Following the arousal or control condition, the participant was asked to complete the RE-IAT, the Bumby RAPE

scale (Appendix B), and the SD-RCS (Appendix C) for a second time. Once these measures were complete, the participant completed the sexual arousal manipulation check (Appendix D). The participant was then debriefed with information presented on the laptop computer (Appendix H) and thanked (for script see Appendix I; for overview of testing procedure see Figure 3). The presentation order of the RE-IAT and self report measures (i.e., Bumby RAPE scale and the SD-RCS) was counterbalanced between participants. The participant's file was then reviewed using the coding manual (Appendix N; for overview see Figure 3).

Figure 3. Overview of Study Proper

Apparatus

All of the measures described above were administered via a laptop computer. The RE-IAT was created using the E-prime 2.0 computer program (Schneider, Eschman, & Zuccolotto, 2002). The data collected were analysed using the Statistical Package for the Social Sciences version 17.0 for Windows.

IAT Scoring Algorithm

The RE-IAT data was collected by the E-prime 2.0 program (Schneider, Eschman, & Zuccolotto, 2002). The E-prime 2.0 program recorded the response latencies for each participant. To calculate the IAT effect the *D* algorithm outlined by Greenwald, Nosek, and Banaji (2003) was used. The *D* algorithm transforms raw data into an IAT effect value that represents the difference in mean reaction times between the two types of combined tasks (i.e., rape and positive share a response key and consenting sex and negative share a response key vs. rape and negative share a response key and consenting sex and positive share a response key). The IAT effect was calculated so that positive scores suggest rape and positive are more strongly associated than rape and negative and negative scores would suggest the opposite.

Results

Data Screening

Prior to running analyses for both the pilot testing and study proper the data were screened for missing data, univariate and multivariate outliers, and violations of statistical assumptions. Any outliers that were detected were reduced to one unit above or below the next extreme score in order to preserve the rank order of the data and sample size. After outliers were reduced if violations of normality were still present transformations were

used and, if transformations were unsuccessful, non-parametric statistical tests were used. If transformations were used, the analyses were conducted on both the untransformed and the transformed data. If the untransformed and transformed data produced similar results the untransformed data were reported, but if the results differed the transformed data were reported.

Pilot Testing

To ensure the measures of attitudes towards rape were assessing the desired construct, pilot testing was conducted to assess the relationship between measures of attitudes towards rape and measures of sexually aggressive behaviour (see Table 3). Pearson's r correlations were used when the assumption of linearity was satisfied and Spearman rank order correlations (r_s) were used when the assumption of linearity was not satisfied.

The RE-IAT was significantly related to both the ROE Scale evaluation score ($r = .40, p < .05$) and total score ($r = .34, p < .05$). As well, the relationships between the RE-IAT and Bumby Rape Scale ($r_s = .23, p = .17$) and the RE-IAT and Likelihood to Rape scale ($r_s = .24, p = .16$) approached significance. The RE-IAT was not significantly related to any of the other measures.

The Bumby Rape scale was significantly related to the SD Rape score ($r_s = .39, p < .05$), the Likelihood to Rape scale ($r_s = .61, p < .01$), and the CSS ($r_s = .55, p < .01$). The Bumby Rape Scale was not significantly related to any other measures.

The SD Rape score was significantly related to the Likelihood to Rape Scale ($r_s = .51, p < .01$), the CSS ($r_s = .66, p < .01$), and the Bumby Rape Scale ($r_s = .39, p < .05$).

The SD-RCS was not significantly correlated with any other measures and none of the relationships approached significance.

Table 3

Correlations between Measures of Attitudes toward Rape and Measures of Sexually Coercive Behaviour for Student Sample

	RE-IAT	Bumby Rape Scale	SD-RCS	SD Rape
RE-IAT	-	-	-	-
Bumby Rape Scale	.23 ^s	-	-	-
SD-RCS	-.05 ^s	.01 ^s	-	-
SD Rape	.02 ^s	.38 ^{s*}	.40 ^{s*}	-
LR Scale	.24 ^s	.61 ^{s*}	.10 ^s	.51 ^{s**}
ROE Evaluation Score	.40 [*]	.22 ^{s*}	-.20 ^s	.16 ^s
ROE Total Score	.34 [*]	.16 ^s	-.03 ^s	.18 ^s
CSS	-.03 ^s	.62 ^{s**}	.16 ^s	.66 ^{s**}

Note. ^s denotes Spearman rank order correlation.* $p < .05$, ** $p < .01$.

Study Proper

Missing Data

Two variables were missing 2.23% ($n = 1$) data. Missing values analysis is used to examine the pattern of missing data for variables that have more than 5.00% missing data, so it was not applied. Since only small amounts of data were missing, pairwise deletion was used when data were missing.

Internal Consistency and Test Re-Test Reliability

The internal consistency of the RE-IAT was computed by calculating Chronbach's alpha for two D scores; one calculated using Block 3 and Block 6 of the RE-IAT and the other calculated using Block 4 and Block 7 of the RE-IAT. The internal consistency of the pre manipulation RE-IAT was moderate to large ($\alpha = .73$; $n = 36$) for both rapists and non sex offenders. The test-retest reliability for the RE-IAT was calculated by correlating the pre manipulation RE-IAT scores with the post manipulation RE-IAT scores for rapists and non sex offenders in the neutral condition; a moderate test-retest reliability of .61 ($p < .01$, $n = 21$) was found. These findings are consistent with the meta-analytic findings in Hoffman et al. (2005; M internal consistency = .79, $k = 50$; M test-retest reliability = .51, $k = 11$) and Lane et al. (2007; M test-retest reliability = .50, $k = 20$).

The test-retest reliability for the Bumby Rape Scale was calculated by correlating the pre manipulation Bumby Rape Scale scores with the post manipulation Bumby Rape Scale scores for rapists and non sex offenders in the neutral condition; a moderate to large test-retest reliability of .72 ($p < .01$, $n = 20$) was found.

The test-retest reliability for the SD-RCS was calculated by correlating the pre manipulation SD-RCS scores with the post manipulation SD-RCS scores for rapists and non sex offenders in the neutral condition; a moderate test-retest reliability of .51 ($p < .05$, $n = 20$) was found.

Primary Hypotheses

Descriptive Information of Sample.

Participants were divided into groups by offender type, either rapist ($n = 24$) or non-sex offender ($n = 12$), and experimental condition (i.e., arousal or control condition). Rapists were defined as sex offenders with at least one victim 16 years of age or older and non-sex offenders were defined as offenders with no prior or index sex-related offences as well as no self-reported sex offences. The descriptive information for each group is presented in Table 4.

Table 4

Descriptives for Study Proper Sample

Statistic	Rapist		Non Sex Offender	
	Arousal (n = 13)	Neutral (n = 11)	Arousal (n = 6)	Neutral (n = 6)
Race				
Caucasian	n (%) 7 (53.85%)	5 (45.45%)	2 (33.33%)	1 (16.67%)
Aboriginal	n (%) 0	2 (18.18%)	0	2 (33.33%)
Non Aboriginal	n (%) 2 (15.38%)	1 (9.10%)	3 (50.00%)	1 (16.67%)
Other	n (%) 4 (30.77%)	0	0	0
Education				
Grade 8	n (%) 12 (92.30%)	11 (100.0%)	6 (100.0%)	6 (100.0%)
Grade 12	n (%) 7 (53.85%)	4 (36.36%)	2 (33.33%)	2 (33.33%)
Age	M (SD) 35-39 (1.52)	35-39 (1.66)	30-34 (1.17)	30-34 (1.22)
Victims Under 16	n (%) 4 (30.77%)	4 (36.36%)	-	-
Static-99	M (SD) 5.50 (1.27)	6.28 (2.50)	-	-
Treatment	n (%) 7 (53.85%)	7 (63.64%)	-	-

Note. Victims under 16 is equal to the number of child victims a participant has had. Treatment is equal to the number of participants who have participated in a sex offender treatment program. Age was measured using ranges which were labelled with a number, the mean of the labels was taken and that was used to determine the mean age range. The Age SD is the SD for the labels mean.

Manipulation Check.

Of the 13 rapists in the arousal condition, 12 properly identified the story they listened to and eight reported being at least somewhat aroused by the story (i.e., on a five point Likert scale from 1 *Not at all aroused* to 5 *Very aroused* participants reported at minimum a 2). As well, four participants reported having an erection as a result of the listening to the story. Furthermore, four participants reported that their arousal lasted throughout the completion of the post manipulation measures.

All six non sex offenders in the arousal condition correctly identified the story they listened to and five reported being at least somewhat aroused by the story. As well, three participants reported having an erection as a result of listening to the story. However, only one participant reported that their arousal lasted throughout the completion of the post manipulation measures.

Of the 11 rapists in the neutral condition, 10 correctly identified the story they listened to and all 10 found the story to be not arousing (One participant was missing data on the manipulation check). Furthermore, all of the participants reported that they did not get an erection as a result of the story nor were they sexually aroused while completing the post manipulation measures.

All six non sex offenders in the neutral condition correctly identified the story they listened to. Five of the participants reported they did not find the story arousing at all (one participant reported a 2 on a five point Likert scale of 1 *Not at all aroused* to 5 *Very aroused*) and all six reported that they did not get an erection as a result of the story. Furthermore, five of the participants reported that they were not aroused while

completing the post manipulation measures (one participant reported a 2 on a five point Likert scale of 1 *Not at all aroused* to 5 *Very aroused*).

Sexual Arousal and Implicit Attitudes toward Rape.

It was hypothesized that rapists in the arousal condition would implicitly evaluate rape more positively when sexually aroused. A within subjects t-test was conducted to compare rapists' pre and post arousal manipulation scores on the RE-IAT. A significant effect in the expected direction was found ($t(12) = -2.78, p < .05$).

Although it was hypothesized that rapists implicit attitudes would change when sexually aroused, it was unknown whether arousal would affect non-sex offenders in the same way. A within subjects t-test was conducted to compare non sex offenders' pre and post arousal manipulation scores on the RE-IAT. The within subjects t-test was non-significant ($t(5) = -1.27, p = .26$).

Additionally, it was hypothesized that in the neutral condition rapists' and non sex offenders' implicit evaluations of rape would not change from pre to post neutral manipulation. Two within subjects t-tests were conducted to compare rapists' and non sex offenders' pre and post neutral manipulation scores on the RE-IAT. For both the rapists and non-sex offenders the within subjects t-tests were non-significant ($t(10) = -2.165, p = .06$; $t(5) = -0.97, p = .38$ respectively). The means, standard deviations and effect sizes for each analysis are presented in Table 5.

Table 5

Pre and Post Manipulation Means, Standard deviations, and Effect Sizes for RE-IAT.

Group	<i>n</i>	Pre Manipulation	Post Manipulation	<i>d</i> (95% CI)
		RE-IAT <i>M</i> (<i>SD</i>)	RE-IAT <i>M</i> (<i>SD</i>)	
Rapists	13	-1.33 (0.44)	-1.00 (0.56)	0.66
Arousal				(0.14 to 1.17)*
Rapists	11	-1.28 (0.44)	-1.00 (0.54)	0.57
Neutral				(0.02 to 1.12) ⁺
Non Sex Offenders	6	-0.92 (0.52)	-0.74 (0.38)	0.40
Arousal				(-0.23 to 1.02)
Non Sex offenders	6	-1.09 (0.76)	-0.86 (0.37)	0.38
Neutral				(-0.31 to 1.08)

Note. CI = Confidence Interval.* $p < .05$. ⁺ $p < .10$.**Sexual Arousal and Explicit Attitudes towards Rape.**

It was hypothesized that rapists in the arousal condition would have significantly more positive explicit attitudes towards rape when sexually aroused. First a within subjects t-test was conducted on rapists pre and post arousal manipulation scores on the Bumby Rape scale. This t-test was significant, but went in the opposite direction than what was hypothesized ($t(12) = 2.24, p < .05$). Second, a within subjects t-test was conducted on rapists' pre and post arousal manipulation SD-RCS. This test was non-significant ($t(12) = -1.61, p = .14$).

As aforementioned, it was unknown how sexual arousal would influence non sex offenders' explicit attitudes towards rape. A within subjects t-test was conducted on non sex offenders' pre and post arousal manipulation scores on the Bumby Rape Scale. The t-test was non-significant ($t(5) = 1.15, p = .30$). Second, a within subjects t-test was

conducted on non sex offenders' pre and post arousal manipulation SD-RCS. This test was non-significant ($t(5) = 1.35, p = .24$).

With regards to rapists and non sex offenders in the neutral condition, it was hypothesized that there would be no change in their explicit attitudes toward rape from pre to post neutral manipulation. For rapists, a within subjects t-test was conducted on their pre and post neutral manipulation Bumby Rape Scores, this test was non-significant ($t(9) = 0.48, p = .64$). As well, a within subjects t- test was conducted on rapists' pre and post neutral manipulation SD-RCS and this test was also non-significant ($t(9) = 1.93, p = .09$). For non sex offenders, a within subjects t-test was conducted on their pre and post neutral manipulation Bumby Rape Scale scores, this test was non-significant ($t(5) = 1.02, p = .35$). As well, a within subjects t-test was conducted on non-sex offenders' pre and post neutral manipulation SD-RCS and this test was also non-significant ($t(5) = 2.17, p = .08$). The means, standard deviations and effect sizes for the Bumby Rape scale are presented in Table 6. The means, standard deviations and effect sizes for the SD-RCS are presented in Table 7.

Table 6

Pre and Post Manipulation Means, Standard Deviations, and Effect Sizes for the Bumby Rape Scale

Group	<i>n</i>	Pre Manipulation Bumby Rape Scale <i>M (SD)</i>	Post Manipulation Bumby Rape Scale <i>M (SD)</i>	<i>d</i> (95% CI)
Rapists	13	52.92 (15.58)	46.08 (6.52)	-0.57*
Arousal				(-0.98 to -0.17)
Rapists	10	55.00 (13.90)	52.80 (14.15)	-0.16
Neutral				(-0.80 to 0.49)
Non Sex Offenders	6	60.50 (10.02)	57.33 (14.14)	-0.26
Arousal				(-0.65 to 0.13)
Non Sex offenders	6	42.17 (6.18)	40.50 (5.92)	-0.28
Neutral				(-0.82 to 0.27)

Note. CI = Confidence interval.

* $p < .05$.

Table 7

Pre and Post Manipulation Means, Standard Deviations, and Effect Sizes for the SD-RCS.

Group	<i>n</i>	Pre Manipulation	Post Manipulation	<i>d</i> (95% CI)
		SD-RCS <i>M (SD)</i>	SD-RCS <i>M (SD)</i>	
Rapists	13	-5.59 (0.76)	-5.09 (1.12)	0.52 (-0.14 to 1.19)
Arousal				
Rapists	10	-5.88 (0.19)	-6.00 (0.01)	- 0.89 (-1.43 to -0.36)
Neutral				
Non Sex Offenders	6	-5.90 (0.17)	-6.00 (0.00)	-0.83 ^a (-1.85 to 0.19)
Arousal				
Non Sex offenders	6	-6.00 (0.00)	-5.61 (0.43)	1.28 ^a (0.10 to 2.47)
Neutral				

Note .^a Correlations for *d* calculations could not be calculated when one mean was constant, so the correlations were estimated to be .50. CI = Confidence interval.

Relationships between Implicit and Explicit Attitudes towards Rape.

The relationships between participants' implicit attitudes toward rape, measured with the RE-IAT, and their explicit attitudes toward rape, measured with the Bumby Rape Scale and the SD-RCS, were examined using both Pearson's *r* correlations and Spearman rank order correlations. Pearson's *r* correlations were used when the assumption of Linearity was satisfied and Spearman rank order correlations were used when the assumption of Linearity was not satisfied. The correlations, sample size, and significance are presented in Table 8.

Table 8

Relationships between Pre Manipulation Implicit and Explicit Measures of Attitudes toward Rape

	RE-IAT	Bumby Rape Scale	SD-RCS
Rapists and Non Sex Offenders ($n = 44$)			
RE-IAT	-	-	-
Bumby Rape Scale	0.11	-	-
SD-RCS	-0.09	0.28 ⁺	-
Rapists ($n = 24$)			
RE-IAT	-	-	-
Bumby Rape Scale	0.10	-	-
SD-RCS	-0.07 ^s	0.35 ^{s+}	-
Non Sex Offenders ($n = 12$)			
RE-IAT	-	-	-
Bumby Rape Scale	0.22	-	-
SD-RCS	-0.40 ^s	0.50 ^{s+}	-

Note. ^s = spearman rank order correlation.

* $p < .05$. ** $p < .01$.

Secondary Hypotheses

Group Differences in Implicit and Explicit Attitudes towards Rape.

Three independent sample t-tests were used to compare rapists and non sex offenders on their pre manipulation RE-IAT, Bumby Rape Scale, and SD-RCS. All three independent sample t-tests were non-significant ($t(34) = 1.66, p = .11$; $t(34) = -0.73, p = .47$; $t(27.02) = -1.76, p = .09$ respectively). Even though none of the above independent

sample t-tests were significant, it is important to note that non sex offenders endorsed less negative implicit attitudes toward rape than the rapists (see Table 9 for means and effect sizes).

Table 9

Differences between Rapists and Non Sex Offenders on Pre Manipulation Implicit and Explicit Attitudes toward Rape

Measure	<i>n</i>	Rapists	Non Sex	<i>d</i> (95% CI)
		<i>M</i> (<i>SD</i>)	Offenders <i>M</i> (<i>SD</i>)	
RE-IAT	36	-1.30 (0.43)	-1.01 (0.63)	- 0.58 (-1.28 to 0.13)
Bumby Rape Scale	36	55.08 (15.53)	51.33 (12.43)	0.26 (-0.44 to 0.95)
SD-RCS	36	-5.73 (0.58)	-5.95 (0.13)	0.46 (-0.25 to 1.16)

Note. CI = Confidence interval.

Alternate Explanations.

Neutral Condition Implicit and Explicit Attitudes toward Rape.

As a result of the small sample size, power was an issue for many of the analyses. In order to see if repeated administrations of the RE-IAT or Bumby Rape Scale could result in significant changes in implicit or explicit attitudes towards rape, the rapist and non sex offender samples in the neutral condition were combined to increase power ($n = 19$) and the pre and post neutral manipulation RE-IAT and Bumby Rape scale scores were examined. Participants were excluded if they identified the story wrong or indicated that they were aroused by the story. For the RE-IAT the within subjects t-test was

significant ($t(18) = -3.33, p < .01$). For the Bumby Rape scale the within subjects t-test was non-significant ($t(18) = 0.55, p = .59$).

Discussion

The primary purpose of the present study was to assess how sexual arousal influences implicit and explicit attitudes toward rape in rapist and non sex offender populations. As well as, to examine the relationships between implicit and explicit attitudes toward rape and to examine group differences in implicit and explicit attitudes toward rape for rapist and non sex offender populations.

Influence of Sexual Arousal on Implicit Attitudes toward Rape

It was predicted that, when in a sexually aroused state, rapists would implicitly evaluate rape more positively. Consistent with this hypothesis, the results demonstrated that when sexually aroused, rapists implicitly evaluated rape less negatively than when in a neutral state. With regards to non sex offenders, it was unknown how sexual arousal would influence their implicit attitudes toward rape. It was found that when sexually aroused non sex offenders implicit attitudes toward rape did not significantly change. It was also predicted that there would be no change in implicit attitudes towards rape when rapists and non sex offenders remained in a neutral state. Consistent with this hypothesis, when both rapists and non sex offenders remained in a neutral state their implicit attitudes toward rape did not significantly change.

Although these findings are consistent with what was hypothesized, it should be noted that for rapists in the neutral condition and non sex offenders in both the neutral and arousal conditions implicit attitudes towards rape did become less negative post manipulation. It is possible that significant differences were not found because of a lack

of power (as a result of small sample sizes) and not because there was no meaningful change in implicit attitudes towards rape. Investigating this line of reasoning further, effect sizes were calculated for the change in implicit attitudes toward rape for each group. As seen in Table 5, for rapists in the arousal condition the effect size was moderate ($d = 0.66$ and significant), for rapists in the neutral condition the effect size was also moderate ($d = 0.57$ and approaching significance) and the effect sizes were small to moderate for non sex offenders in the neutral and arousal conditions ($d = 0.38$ and $d = 0.40$ respectively). All of the effect sizes are similar; suggesting the lack of significant findings may be due to a lack of power. However, it is promising that the rapists in the arousal condition have the largest effect size. It is also important to note that the effect size is slightly larger for the non sex offenders in the arousal condition relative to the effect size for the non sex offenders in the neutral condition. It is possible that the change in implicit attitudes towards rape for rapists and non sex offenders in the arousal condition is a result of being sexually aroused and completing the RE-IAT for a second time, whereas the change in implicit attitudes toward rape for the rapists and non sex offenders in the neutral condition is only a result of repeated administrations of the RE-IAT.

In order to see if repeated administrations of the RE-IAT could result in significant changes in implicit attitudes towards rape, the rapist and non sex offender samples in the neutral condition were combined to increase power ($n = 19$) and the pre and post neutral manipulation implicit attitudes towards rape were examined. The results demonstrated that implicit attitudes towards rape for participants in the neutral condition became significantly less negative post manipulation. Furthermore, the test re-test

reliability for the post manipulation RE-IAT scores for rapists and non sex offenders in the neutral condition was moderate ($r = .61, p < .01$), suggesting some change can be expected between pre and post neutral manipulation RE-IAT Scores. These finding suggests that sexual arousal may not be the only reason for the changes in rapists' implicit attitudes toward rape, but instead, the changes are potentially the result of repeated administrations of the RE-IAT and sexual arousal.

If the changes in implicit attitudes towards rape are partly due to sexual arousal for rapists in the arousal condition than these findings would be consistent with what was hypothesized. Specifically, these results would be consistent with the literature that suggests implicit attitudes can be context dependent (e.g., Barden et al., 2004; Dasgupta & Greenwald, 2001; Mitchell et al., 2003) and influenced by motivational states (Ferguson & Bargh, 2004; Seibt et al., 2007).

More importantly, these results are consistent with theories of rape. For example, the *Social Information- Processing Dysfunction Model* (Johnston & Ward, 1996; Hudson et al., 1997; see Stinson et al., 2008 for overview) suggests previously held attitudes, beliefs and cognitive schema coupled with motivational factors determine what information is perceived and that when limited cognitive resources are available (e.g., when sexually aroused) these previously held attitudes, beliefs and cognitive schemas are relied upon more heavily. If rapists' implicit attitudes towards rape change when sexually aroused than this could imply that they are relying more heavily upon their attitudes towards sex, and more specifically rape, when sexually aroused.

Similarly, the *Integrated Theory of Sex Offending* (Marshall & Barbaree, 1990) suggests transitory situational factors, such as sexual arousal, promote sexually

aggressive behaviour by disinhibiting the prosocial controls an individual has that prevent rape. The above findings are also consistent with this theoretical model; specifically if rapists' implicit attitudes towards rape become less negative when sexually aroused than this could be the result of sexual arousal disinhibiting the prosocial controls that prevent rape.

These findings are also consistent with Ward and colleagues' (Ward & Hudson, 1998; Ward & Hudson, 2000; Yates & Kingston, 2006) *Self-Regulation Model of Sex Offending*. This model suggests that for three of four types of offenders (i.e., avoidant-passive, avoidant-active, and approach-passive) sexual arousal can influence their rape-related cognitions and promote sexually aggressive behaviour. The change in implicit attitudes for sexually aroused rapists suggests sexual arousal can influence rape-related cognitions and as a result could promote sexually aggressive behaviour. In sum, finding sexual arousal influences rapists' implicit attitudes towards rape is consistent with current theoretical models of the offending process.

In addition to being consistent with the literature, finding sexual arousal may influences rapists' implicit attitudes towards rape adds to the rape-related literature. To date, previous research has found that sexual arousal increases the reported likelihood of using sexually coercive behaviour (Ariely & Loewenstein, 2006; Loewenstein et al., 1997) and that self-reported sexual arousal was significantly related to reported likelihood of using sexually coercive behaviour (Bouffard, 2002). The current findings add to this literature by suggesting sexual arousal also influences implicit attitudes towards rape. Furthermore, from Ajzen's (1991) *Theory of Planned Behaviour* we know intentions are a product of attitudes, social norms, and perceived control over a situation.

From these findings and Ajzen's theoretical model, it is possible to suggest that sexual arousal influences implicit attitudes towards rape and this leads to increases in intentions to commit sexually aggressive behaviour.

It was also noted that the published studies to date did not control for a history of sexual aggression when examining the influence of sexual arousal on the self-reported likelihood of using sexually aggressive behaviour (e.g., Ariely & Loewenstein, 2006). The current results suggest that sexual arousal may change implicit attitudes toward rape in a similar manner for both rapists and non sex offenders. These findings imply not controlling for a history of sexual aggression is not necessarily problematic when examining the influence of sexual arousal on sexually aggressive behaviour. However, it should be noted that the change in implicit attitudes for rapists in the arousal condition was larger than the change in implicit attitudes for non sex offenders in the arousal condition. Furthermore, this was true even when considering the amount of change that could be expected due to repeated administrations of the RE-IAT (i.e., by examining the change in implicit attitudes for rapists and non sex offender in the neutral condition). It seems that although sexual arousal has a similar influence on the direction of both rapists' and non sex offenders' implicit attitudes toward rape, it may have a stronger influence on rapists' implicit attitudes towards rape. Thus, future studies may want to consider taking a history of sexual aggression into consideration.

The above results suggest that sexual arousal may influence rapists' implicit attitudes towards rape. Tying this empirical evidence together with current theoretical models and empirical evidence in the literature, it can be speculated that sexual arousal may change rapists' implicit attitudes towards rape, making them less negative, which in

turn results in greater intentions to commit rape and leads to sexually aggressive behaviour. This notion supports current theoretical models of rape and further confirms attitudes play an important role in sexually aggressive behaviour.

Influence of Sexual Arousal on Explicit Attitudes toward Rape

It was also hypothesized that when sexually aroused, rapists would explicitly evaluate rape more positively than when in a neutral state. Inconsistent with this hypothesis, it was found that rapists' explicit evaluations of rape on the SD-RCS did not change when sexually aroused. Furthermore, contrary to the above hypothesis, the results demonstrated that rapists explicitly evaluate rape more negatively on the Bumby Rape scale when sexually aroused (see Table 6). With regards to non sex offenders, predictions were not made about the influence of sexual arousal on explicit attitudes toward rape. The results demonstrated that non sex offenders' explicit attitudes towards rape did not significantly change for either the SD-RCS or the Bumby Rape Scale. Additionally, it was hypothesized that for both rapists and non sex offenders in the neutral condition there would be no significant change in explicit attitudes towards rape and the results were consistent with this hypothesis.

Bumby Rape Scale.

Although, explicit attitudes towards rape on the Bumby Rape Scale became significantly more negative for the rapists in the arousal condition, the same pattern was observed for rapists in the neutral condition and for non sex offenders in both the arousal and neutral conditions. Again, it is possible that significant differences were not found because of a lack of power (as a result of small sample size) and not because of a lack of effects. Investigating this line of reasoning further, effect sizes were calculated for the

change in Bumby Rape Scale scores for each group. As seen in Table 6, for rapists in the arousal condition the effect size was moderate ($d = -0.57$ and significant), for rapists in the neutral condition the effect size was small ($d = -0.16$) and the effect sizes were small for non sex offenders in the neutral and arousal conditions ($d = -0.26$ and $d = -0.28$ respectively). The fact that the rapists in the arousal condition had a moderate change and the other three groups of offenders had small changes suggests there was no significant change for the other three groups of offenders because of a lack of effects.

In an attempt to resolve this issue further, the rapist and non sex offender samples in the neutral condition were combined to increase power ($n = 19$). The pre and post neutral manipulation Bumby Rape scores were examined and the results were non-significant. Furthermore, the Bumby Rape scale had a moderate to large test re-test reliability ($r = .72, p < .01$), suggesting it measured explicit attitudes towards rape relatively consistently. Both of these findings suggest there was no significant change for the rapists and non sex offenders in the neutral condition because of a lack of effects.

Finding that when sexually aroused rapists explicitly evaluate rape more negatively on the Bumby Rape Scale is inconsistent with what was hypothesized. Ajzen's (1991) *Theory of Planned Behaviour* suggests intentions are the product of attitudes, social norms, and perceived control over a situation. As well, theoretical models of the rape offence process generally suggest that sexual arousal influences rapists' rape-related cognitions making them more likely to commit rape. Furthermore, recent studies suggest that sexual arousal increases self-reported likelihood to use sexually coercive behaviour (Ariely & Loewenstein, 2006; Loewenstein et al., 1997) and that sexual arousal is related to self-reported likelihood of using sexually coercive behaviour (Bouffard, 2002).

Generally speaking, from these theoretical models and empirical evidence it would be expected that sexual arousal would influence explicit attitudes towards rape, making them more positive, which would then lead to greater intentions to use sexually aggressive behaviour.

One possible explanation for the unexpected results is that the Bumby Rape scale does not exclusively measure attitudes toward rape. The Bumby Rape scale measures rape-related cognitive distortions which encompass assumptions, beliefs, and attitudes towards rape (Bumby, 1996). Thus, it is possible that the items were rated more negatively when rapists were sexually aroused because they were assessing rape-related cognitive distortions and not purely attitudes towards rape. Assessing rape-related cognitive distortions instead of purely explicit attitudes toward rape may have been problematic because the rape-related cognitive distortions may have not been congruent with the goal of obtaining sex. Recent research on implicit attitudes suggests that when pursuing a goal individuals implicitly evaluate goal related stimuli more positively than unrelated stimuli (Ferguson & Bargh, 2004; Seibt et al., 2007). If this same line of reasoning is applied to explicit attitudes than it would be expected that statements facilitating sex (e.g., rape is good because it will result in sexual satisfaction) would be evaluated more positively and statements hindering the obtainment of sex would be evaluated more negatively. Applying this line of reasoning to the Bumby Rape Scale, many of the cognitive distortions assessed focus on hostility towards women (e.g., most women are sluts and get what they deserve) and justifications for rape (e.g., A lot of men who rape do so because they are deprived of sex) and it can be argued that endorsing these statements would not facilitate sex because they are either unrelated to obtaining

sex or would hinder obtaining sex. Thus, it is possible that when sexually aroused some of the Bumby Rape scale items would be rated more negatively.

The implications from these findings are that the influence of sexual arousal may be specific to attitudes, intentions, or behaviour that is directly related to obtaining sex. Thus future research may want to focus on goal specific explicit attitudes instead of rape-related cognitive distortions.

SD-RCS.

Although there was no significant change in explicit attitudes towards rape measured by the SD-RCS for any of the four offender groups, this also could be the result of a lack of power (due to small sample sizes) and not a lack of effects. Effect sizes were calculated for rapists and non sex offenders in the arousal and neutral conditions. Interestingly, for rapists in the arousal condition the change in explicit attitudes had a moderate positive effect size ($d = 0.52$) and for rapists in the neutral condition the change in explicit attitudes had a large negative effect size ($d = -0.89$), whereas for non sex offender in the arousal condition the change in explicit attitudes had a large negative effect size ($d = -0.83$) and for non sex offenders in the neutral condition the change in explicit attitudes had a large positive effect size ($d = 1.28$). The fact that the changes in explicit attitudes for rapists and non sex offenders in the neutral condition were large suggests that repeated administrations of the SD-RCS may cause changes in explicit attitudes towards rape. Consistent with this notion, the SD-RCS only had moderate test re-test reliability ($r = .51, p < .05$). Additionally, the lack of consistency in a pattern of change is also consistent with the moderate test re-test reliability, suggesting changes in

explicit attitudes towards rape measured by the SD-RCS are likely a result of repeated administrations of the measure and not sexual arousal.

These results are also inconsistent with what was hypothesized. From the theoretical models and empirical evidence described above, it was expected that sexual arousal would influence explicit attitudes towards rape, making them more positive, which would then lead to greater intentions of using sexually aggressive behaviour. One possible explanation for the non significant results is the lack of consistency in measuring explicit attitudes towards rape.

Alternatively, the non significant results could mean that explicit attitudes towards rape do not meaningfully change as a function of sexual arousal. Explicit attitudes are accessed through introspection (Fazio & Olson, 2003); introspection can be problematic because empirical evidence suggests some attitudes may not be accessible through introspection (Greenwald & Farnham, 2000; Nosek & Smyth, 2007). It is possible that the attitudes that lead to changes in self-reported likelihood of using sexually aggressive behaviour are implicit only, not both implicit and explicit. From this line of reasoning we would expect to see no changes in explicit attitudes towards rape as a function of sexual arousal. In order to determine whether sexual arousal influences explicit attitudes toward rape a more reliable measure of explicit attitudes should be used.

Relationship between Implicit and Explicit Attitudes toward Rape

Additional analyses were also conducted to examine the relationships between implicit and explicit attitudes toward rape for rapists, non sex offenders, and both rapists and non sex offenders. None of the relationships reached significance, however the same patterns were seen within each group of correlations. Specifically, the RE-IAT had a

small positive relationship with the Bumby Rape Scale, but a small to moderate negative relationship with the SD-RCS. As well, the Bumby Rape Scale had a small to moderate positive relationship with the SD-RCS.

The small positive correlations between the RE-IAT and the Bumby Rape Scale are consistent with the notion that implicit and explicit attitude measures assess related but distinct constructs. As well, these results are consistent with the findings in a recent meta-analysis that examined the strength of relationships between implicit and explicit measures of attitudes (Hofmann et al., 2005; mean $r = .24$, $n = 12,289$).

The small to moderate negative relationship between the RE-IAT and SD-RCS was unexpected. One possible explanation is that the SD-RCS was too transparent in measuring attitudes towards rape. This transparency coupled with the sensitive nature of the topic may have led participants to answer in a socially desirable manner, meaning their explicit attitudes towards rape were not accurately measured. Social desirability was not assessed in the present study, however, because recent research has found interpreting measures of social desirability is problematic for offender populations. For example, in a series of studies Mills and colleagues (Mills, Loza, & Kroner, 2003; Mills & Kroner, 2005, 2006) have found that impression management is negatively related to criminal risk (i.e., antisociality). Suggesting antisocial participants are more likely to respond honestly to self-report measures. Furthermore, the SD-RCS was moderately correlated with the Bumby Rape scale suggesting the two measures are assessing similar constructs.

Alternatively, Hofmann et al. (2005) found evidence that suggests correlations between implicit and explicit attitude measures increase as response spontaneity increases. This evidence is consistent with the notion that implicit attitudes are

automatically retrieved (i.e., do not require introspection) whereas explicit attitudes require introspection (Fazio & Olson, 2003; Greenwald et al., 1998). It is possible that asking participants to rate rape and consenting sex on the seven different semantic differential scales (e.g., good to bad) resulted in a decrease in response spontaneity. Spontaneity may have decreased because participants had to repeatedly introspect and explicitly evaluate rape and consenting sex. If response spontaneity did decrease then lower correlations between the RE-IAT and SD-RCS would be expected.

The moderate positive relationships between the Bumby Rape Scale and the SD-RCS are consistent with the notion that both measures are assessing explicit attitudes towards rape. The fact that the relationships are not stronger could further indicate that the SD-RCS was subject to socially desirable responding. However, a more plausible alternate explanation is that the two measures were assessing explicit attitudes towards rape in a related but distinct way. As mentioned above, the Bumby Rape scale measures rape-related cognitive distortions not exclusively explicit attitudes towards rape, whereas the SD-RCS measures only explicit attitudes towards rape. Consequently, both measures are assessing explicit attitudes towards rape in different ways. Thus, a moderate correlation would be expected.

These findings are generally consistent with the current literature; that implicit and explicit attitudes are related but distinct constructs. With regards to the rape-related literature, these results suggest that two types of rape-related attitudes exist and that information may be missed if only one type of attitude is assessed. Thus, future research examining attitudes towards rape should assess both implicit and explicit attitudes toward rape.

Group Differences in Implicit and Explicit Attitudes towards Rape

Additional analyses were also conducted to assess whether rapists and non sex offenders differed in their implicit and explicit attitudes towards rape. Contrary to what was expected, rapists and non sex offenders did not significantly differ in their implicit and explicit attitudes towards rape. Furthermore, it is important to note, non sex offenders endorsed less negative implicit attitudes toward rape than rapists (Non sex offender $M = -1.01$, Rapist $M = -1.30$) on the RE-IAT.

With regards to the RE-IAT, these results are inconsistent with what has been found in student populations (Nunes et al., 2008). Specifically, Nunes et al. (2008) found that male undergraduate students who had a history of sexually aggressive behaviour had significantly less negative implicit attitudes towards rape than male undergraduate students who did not have a history of sexually aggressive behaviour. As well, Nunes et al. (2008) found that male undergraduate students who reported a higher likelihood of committing rape had significantly less negative implicit attitudes towards rape than male undergraduate students who reported they were not at all likely to commit rape. It is important to note, however, that the IAT used in Nunes et al. (2008) consisted of *rape* versus *not rape* target categories and *good* versus *bad* attribute categories, whereas, the RE-IAT used in the current study consisted of *rape* versus *consenting sex* target categories and *positive* versus *negative* attribute categories. It is possible that the change in target and attribute categories is the cause for the unexpected results. Particularly, contrasting *rape* with *consenting sex* instead of *non rape* may have resulted in rapists not having significantly different implicit attitudes toward rape than non sex offenders. In speculation, it is possible that *rape* relative to *consenting sex* is more negative for rapists

because they have more positive associations with *consenting sex*, but *rape* relative to *non rape* is more positive for sexually aggressive male undergraduate students because they have at least some positive associations with *rape* and no particular associations with non rape. Similarly for non sex offenders, it is possible that *rape* relative to *consenting sex* is more negative because they have more positive associations with *consenting sex* and for non sexually aggressive male undergraduate students *rape* relative to *non rape* is more negative because they have more negative associations with *rape* but no particular associations with *non rape*.

The above findings question the validity of the RE-IAT. However in contrast to these results, small positive correlations were found between the RE-IAT and Bumby Rape scale for both rapists and non sex offenders, suggesting the two measures are assessing similar constructs. As well, in the student sample, the RE-IAT had a moderate positive relationship with both the Evaluation of Sexual Coercion Scale evaluation score and total score, as well as, small positive relationships with the Bumby Rape Scale and the Likelihood to Rape scale. These findings support the notion that the RE-IAT used in the present study is measuring implicit attitudes towards rape.

With regards to the Bumby Rape Scale, although the results were non-significant, it should be noted that the direction of the small difference between rapists and non sex offenders was consistent with prior research. That is, rapists endorse more rape-related cognitive distortions than other populations. However, some studies have found that rapists do not significantly differ from comparisons groups on the Bumby Rape Scale (e.g., Arkowitz & Vess, 2003; Blumenthal, Gudjonsson, & Burns, 1999). As mentioned above, the Bumby Rape scale measures rape-related cognitive distortions which

encompass assumptions, beliefs, and attitudes towards rape. One potential explanation for the lack of significant findings is that some assumptions and beliefs about rape may be common among non sex offender populations (Lonsway & Fitzgerald, 1994). For example, in a review of the rape-related cognitions literature Lonsway and Fitzgerald (1994) concluded that individuals in the general population tend to endorse some rape-related cognitions. Thus, it is possible that rapists and non sex offenders did not significantly differ in their Bumby Rape scale scores because the non sex offenders endorsed some of the rape-related cognitive distortions.

Similarly, there was no significant difference between rapists and non sex offenders on the SD-RCS although the direction of the moderate difference is consistent with what was hypothesized; that rapists would endorse more explicit attitudes toward rape than non sex offenders. It is possible that significant differences were not found because of a lack of power (as a result of small sample size) and not because of a lack of effects.

Limitations

The primary limitation of the current findings is the small sample size. With larger sample sizes power to find significant differences would not have been as much of an issue. As well, with larger sample sizes the effect sizes for each group could have been contrasted to see if the changes in attitudes significantly differed. A second limitation was the effectiveness of the sexual arousal manipulation. Although participants reported that they felt sexually aroused by the sexual arousal manipulation, it was often very minimal arousal and many participants reported that the arousal did not last through the completion of the attitude measures. A more effective sexual arousal manipulation

combined with a larger sample size would clarify the above results. Furthermore, it should be taken into consideration that the sample of rapists and non sex offenders used in this study were not fully representative of the general offender population. Although the sample of rapists in this study were recruited from several different institutions, on average they were at higher risk for sexual recidivism (Static-99 $M = 5.5$, $SD = 2.24$) than the general sex offender population (Static -99 $M = 2$; Static-99 Clearinghouse, 2009) and the majority of non sex offenders were recruited from a mental health facility. Consequently, the results should be replicated with a more representative sample.

Conclusion

The current study is the first in the published literature to examine the influence of sexual arousal on implicit and explicit attitudes toward rape and, as a result, the findings are preliminary. Finding sexual arousal may influence rapists' implicit attitudes towards rape supports several theoretical models of rape that suggest sexual arousal plays a role in the offence process. Furthermore, from these results it can be speculated that sexual arousal leads to greater self-reported likelihood of using sexually aggressive behaviour because implicit attitudes towards rape become less negative. As well, these findings suggest that sexual arousal has a similar influence on both rapists and non sex offenders; however the influence may be stronger for rapists. Thus, a history of sexual aggression should be controlled when studying the influence of sexual arousal. In future studies, these results need to be replicated with a larger more representative sample and a more effective sexual arousal manipulation.

The findings regarding explicit attitudes towards rape were not consistent with what was expected from the current literature. It is possible that rapists evaluated rape

more negatively when sexually aroused on the Bumby Rape scale because the Bumby Rape scale assesses rape-related cognitive distortions and not exclusively attitudes towards rape. It was suggested that rapists may have found some of the rape-related cognitive distortions unrelated or detrimental to the goal of obtaining sex and this resulted in more negative explicit attitudes towards rape. With regards to explicit attitudes towards rape measured by the SD-RCS it was suggested that explicit attitudes may have not changed as a function of sexual arousal because of the moderate test re-test reliability of the measure. It was also suggested, however, that explicit attitudes towards rape may not have changed because explicit attitudes towards rape are not influenced by sexual arousal. Future studies should focus on using larger sample sizes and more reliable measures of explicit attitudes towards rape to assess whether sexual arousal influences explicit attitudes towards rape.

The relationships between implicit and explicit attitudes toward rape are generally consistent with the current literature; that implicit and explicit attitudes are related but distinct constructs. Furthermore, it was suggested that the two explicit measures of attitudes towards rape measured explicit attitudes towards rape in a distinct but related way. With regards to the rape-related literature, these results suggest that two types of rape-related attitudes exist and that information may be missed if only one type of attitude is assessed. Thus, future research examining attitudes towards rape should assess both implicit and explicit attitudes toward rape.

Finding that rapists and non sex offenders did not significantly differ in their implicit and explicit attitudes towards rape was unexpected. For implicit attitudes towards rape, finding that non sex offenders had less negative implicit attitudes towards rape was

also unexpected. It was suggested that this may have been a result of the target categories used in the RE-IAT. These results should be replicated with a larger and more representative sample before it is concluded that rapists and non sex offenders do not significantly differ on the RE-IAT. As well, future studies should use the IAT from Nunes et al. (2008) with an offender population to see if the results are comparable to those obtained with a student sample. For explicit attitudes towards rape, although the groups did not significantly differ the direction of the difference was consistent with the current literature. Future studies should focus on replicating these results with a larger and more representative sample.

In Sum, the current findings allow us to better understand the role of sexual arousal and attitudes in the commission of sexually aggressive behaviour. Understanding the relationship between sexual arousal and attitudes toward rape, allows us to advance theory of why rape occurs, potentially target rape-related attitudes more effectively in sex offender treatment programs, and develop preventive measures for rape.

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Appendix A: BACKGROUND QUESTIONNAIRE

How old are you? (16-17, 18-19, 20-24, 25-29, 30-34, 35-39, 40-49, 50-59, 60 or older)

Do you speak English fluently? (yes/no)

Do you understand written English? (yes/no)

Do you understand spoken English? (yes/no)

Is English your first language? (yes/no)

Did you attend an English grade school (grades 1 to 8)? (yes/no)

Did you attend an English high school? (yes/no)

Are you right-handed or left-handed? (right-handed, left-handed, both)

EDUCATION

What is the highest grade you completed in school? (6 or less, 7, 8, 9, 10, 11, 12, 13, none)

Did you take any college or university courses? (yes/no)

Did you complete a college or university degree? (yes/no)

Were you ever suspended or expelled from school between Grades 1 to 8? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

Before your 13th birthday, were you ever knocked unconscious (for example, falling from a tree or hitting your head in a hockey game)?

After your 13th birthday, were you ever knocked unconscious (for example, in a car accident or in a sports injury)?

Were you ever diagnosed with a learning disability? (yes/no)

Before you came to prison, how much money did you usually make in a year? (\$0 to \$10,000, \$11,000 to \$20,000, \$21,000 to \$30,000, \$31,000 to \$40,000, \$41,000 to \$50,000, \$51,000 to \$60,000, \$61,000 to \$70,000, \$71,000 to \$80,000, \$81,000 or more)

RELATIONSHIPS

Did you live with your biological parents until you were at least 16 years old? (just your mother, just your father, both parents, neither of your parents)

How many boys did your mother give birth to before you were born? (one, two, three, four, five, six, seven, eight or more, none)

Have you ever been married? (once, twice, three times, four times, five times, six times, seven times, eight time or more, never been married)

What is the longest time you have lived with a sexual partner (for example, a wife, girlfriend, or boyfriend)? (1 month, 6 months, 1 year, 2 years, 3 years, 4 years, 5 years, 6 years or longer, never lived with a sexual partner)

At the time of your most recent offence were you married or living with a sexual partner? (yes/no)

Do you have children that you raised or helped to raise? (one, two, three, four, five, six, seven, eight or more, none)

CRIMINAL HISTORY

Not counting the offences that you're in prison for now, how many violent offences (for example, assault, robbery, making threats) have you been convicted of? (one, two, three, four, five, six, seven, eight or more, none)

Not counting the offences that you're in prison for now, how many non-violent non-sex offences (for example, theft, break and enter, drug possession) have you been convicted of? (one, two, three, four, five, six, seven, eight or more, none)

How many times have you been sent back to prison because you violated the conditions of your bail, probation, parole, or statutory release? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

SEXUAL ORIENTATION

Who are you most sexually attracted to? (women, men, girls, boys, all of the above, women and men, girls and boys, women and girls, men and boys)

How many women have you had consenting sexual contact with? (one, two, three, four, five to ten, eleven to twenty, twenty-one to thirty, thirty-one or more, none)

How many men have you had consenting sexual contact with? (one, two, three, four, five to ten, eleven to twenty, twenty-one to thirty, thirty-one or more, none)

How old were you when you first had consenting sexual contact with a female? (11 or younger, 12-13, 14-15, 16-17, 18-19, 20-24, 25-29, 30 or older, never had consenting sexual contact with a female)

How old were you when you first had consenting sexual contact with a male? (11 or younger, 12-13, 14-15, 16-17, 18-19, 20-24, 25-29, 30 or older, never had consenting sexual contact with a male)

Do you get sexually turned on by hurting or humiliating other people? (yes, no)

SEX OFFENCE HISTORY

How old were you when you committed your first sex offence? (15 or younger, 16-17, 18-19, 20-24, 25-29, 30-39, 40-49, 50 or older, never committed a sex offence)

How many of your sex offence victims were not related to you (not family)? (one, two, three, four, five, six, seven or more, none, I never committed a sex offence)

How many of your sex offence victims had you never met and talked with at least 24 hours before the offence? (one, two, three, four, five, six, seven or more, none, I never committed a sex offence)

Female Victims

How many women aged 16 or older have you forced to have sexual contact with you when they didn't want to by using physical force or threats? (one, two, three, four, five, six, seven, eight or more, none)

How many girls under the age of 16 have you had sexual contact with when you were at least 5 years older than them? (one, two, three, four, five, six, seven, eight or more, none)

How many girls under the age of 14 have you had sexual contact with when you were at least 5 years older than them? (one, two, three, four, five, six, seven, eight or more, none)

How many girls under the age of 12 have you had sexual contact with when you were at least 5 years older than them? (one, two, three, four, five, six, seven, eight or more, none)

Male Victims

How many men aged 16 or older have you forced to have sexual contact with you when they didn't want to by using physical force or threats? (one, two, three, four, five, six, seven, eight or more, none)

How many boys under the age of 16 have you had sexual contact with when you were at least 5 years older than them? (one, two, three, four, five, six, seven, eight or more, none)

How many boys under the age of 14 have you had sexual contact with when you were at least 5 years older than them? (one, two, three, four, five, six, seven, eight or more, none)

How many boys under the age of 12 have you had sexual contact with when you were at least 5 years older than them? (one, two, three, four, five, six, seven, eight or more, none)

Have you ever done a sex offence that didn't involve contact, like child pornography or flashing someone? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

SEX OFFENCE CHARGES/CONVICTIONS

Not counting the offences that you're in prison for now, how many sex offences have you been convicted of? (one, two, three, four, five, six, seven, eight or more, none)

Have you ever been charged with a sex offence against someone aged 16 or older? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

Have you ever been charged with a sex offence against someone between the ages of 12 and 15? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

Have you ever been charged with a sex offence against someone under the age of 12? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

DENIAL

Are you guilty of the sex offences that you're currently in prison for? In other words, did you actually do it? (Guilty of all my sex offence convictions, guilty of some of my sex offence convictions, guilty of none of my sex offence convictions, not in prison for a sex offence)

TREATMENT

How many treatment programs for sex offending have you been in since your most recent offence? (one program, two programs, three programs, four programs, five programs, six programs, seven programs, eight or more programs, none)

LIKELIHOOD TO SEXUALLY OFFEND

What is the likelihood that you would rape someone if you could be assured of not being caught and punished? (1 = Not at all likely; 5 = Very likely)

What is the likelihood that you would have sexual contact with a child under 12 years old if you could be assured of not being caught and punished? (1 = Not at all likely; 5 = Very likely)

CHILDHOOD SEXUAL VICTIMIZATION

The next few questions ask about sexual contact you may have had with older people when you were a child (under 12 years old). Examples of what we mean by sexual contact are someone else touching your penis or anus; having you touch their penis, vagina, or anus; oral sex; or sexual intercourse.

Before you were 12 years old, did you ever have sexual contact with a boy or man at least 5 years older than you at the time? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

Before you were 12 years old, did you ever have sexual contact with a girl or woman at least 5 years older than you at the time? (once, twice, three times, four times, five times, six times, seven times, eight times or more, never)

Appendix B: Bumby RAPE Scale

<i>Item</i>	<i>Rating Scale</i>				
	<i>Strongly Disagree</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4 Strongly Agree</i>
1. Men who commit rape are probably responding to a lot of stress in their lives, and raping helps to reduce that stress.					
2. Women who get raped probably deserved it.					
3. Women generally want sex no matter how they can get it.					
4. Since prostitutes sell their bodies for sexual purposes anyway, it is not as bad if someone forces them into sex.					
5. If a women does not resist strongly to sexual advances, she is probably willing to have sex.					
6. Women often falsely accuse men of rape.					
7. A lot of women who get raped had "bad reputations" in the first place.					
8. If women did not sleep around so much, they would be less likely to get raped.					
9. If a women gets drunk at a party, it is really her own fault if someone takes advantage of her sexually.					
10. When women wear tight clothes, short skirts, and no bra or underwear, they are asking for sex.					
11. A lot of women claim they were raped just because they want attention.					
12. Victims of rape are usually a little bit to blame for what happens.					

13. If a man has sex with a woman before, then he should be able to have sex with her any time he wants.
14. Just fantasizing about forcing someone to have sex isn't all that bad since no one is really being hurt.
15. Women who go to bars a lot are mainly looking to have sex.
16. A lot of times when women say "no" they are just playing hard to get, and really mean "yes".
17. Part of a wife's duty is to satisfy her husband sexually whenever he wants it, whether or not she is in the mood.
18. Often a woman reports rape long after the fact because she gets mad at the man she had sex with and is just trying to get back at him.
19. As long as a man does not slap or punch a woman in the process, forcing her to have sex is not as bad.
20. When a woman gets raped more than once, she is probably doing something to cause it.
21. Women who get raped will eventually forget about it and get on with their lives.
22. On a date, when a man spends a lot of money on a woman, the woman ought to at least give the man something in return sexually.
23. I believe that if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way.
24. When women act like they are too good for men, most men probably think about raping the women to put them in their place.
25. I believe that society and the courts are too tough on rapists.

26. Most women are sluts and get what they deserve.
 27. Before the police investigate a woman's claim of rape, it is a good idea to find out what she was wearing, if she had been drinking, and what kind of person she is.
 28. Generally, rape is not planned- a lot of times it just happens.
 29. If a person tells himself that he will never rape again, then he probably won't.
 30. A lot of men who rape do so because they are deprived of sex.
 31. The reason a lot of women say "no" to sex is because they don't want to seem loose.
 32. If a women goes to the home of a man on the first date, she probably wants to have sex with him.
 33. Many women have a secret desire to be forced into having sex.
 34. Most of the men who rape have stronger sexual urges than other men.
 35. I believe that any woman can prevent herself from being raped if she really wants to.
 36. Most of the time, the only reason a man commits rape is because he was sexually assaulted as a child.
-

Appendix C**Semantic Differential Measures of Evaluation of Rape and Consenting Sex****Rape is:**

Negative			Neutral			Positive
-3	-2	-1	0	1	2	3
Bad			Neutral			Good
-3	-2	-1	0	1	2	3
Wrong			Neutral			Right
-3	-2	-1	0	1	2	3
Immoral			Neutral			Moral
-3	-2	-1	0	1	2	3
Not Enjoyable			Neutral			Enjoyable
-3	-2	-1	0	1	2	3

Consenting sex is:

Negative			Neutral			Positive
-3	-2	-1	0	1	2	3
Bad			Neutral			Good
-3	-2	-1	0	1	2	3
Wrong			Neutral			Right
-3	-2	-1	0	1	2	3
Immoral			Neutral			Moral
-3	-2	-1	0	1	2	3
Not Enjoyable			Neutral			Enjoyable
-3	-2	-1	0	1	2	3

Appendix D: Manipulation Check

Please answer the following questions:

1. What was the story you listened to about?

- A golf tournament
- Two co-workers
- A man and a woman having sex
- A hockey game

2. Was the story you listened to sexually arousing?

Not at all		Somewhat		Very much so
1	2	3	4	5

3. Did you get an erection while you were listening to the story?

Not at all		Somewhat		Very much so
1	2	3	4	5

4. If you were sexually aroused while listening to the story, were you sexually aroused while completing the grouping tasks and the questionnaires?

Not at all		Somewhat		Very much so
1	2	3	4	5

5. Are you still sexually aroused now?

Not at all		Somewhat		Very much so
1	2	3	4	5

6. How sexually aroused were you before you heard the story?

Not at all		Somewhat		Very much so
1	2	3	4	5

7. On average how sexually aroused are you on a normal day (like yesterday)?

Not at all

Somewhat

Very much so

1

2

3

4

5

8. Did the story make you feel distressed?

Not at all

Somewhat

Very much so

1

2

3

4

5

9. How often did you used to watch pornographic movies before coming to prison?

Never

Sometimes

Very often

1

2

3

4

5

Appendix E: Sexual Arousal Story

You start kissing my neck and then gradually make your way up to my ear. I turn my head and we kiss passionately. You take off your shirt and I run my hands along your pecs and back. You take off my shirt and kiss my breasts, licking my nipples in a slow circular motion.

You lay me on the couch and unbutton my pants. As you kiss my lips and neck, you rub my pussy. Your lips feel fantastic against my skin as you go all the way down from my neck to my hips.

You take off my pants and kiss my calves and then the top of my thighs, kissing towards my inner thighs and around my pussy.

I grab the back of your head. You stop to take off your pants while I watch you. You spread my legs apart and slowly lick my clit. I moan with pleasure. You stick your finger in me, moving it up and down, back and forth as you lick and nibble. "Mmm, feels so very good," I said.

You get on top of me and kiss me. I turn you over on your back and tongue my way down your body. Your breathing grows deeper and quicker. As I get to the top of your boxers, I lick your hips, then lower and lower. I slide off your boxers and lick your inner thighs and around the base of your dick to the tip, nice and slow.

All around my tongue explores until I wrap my lips around the top of your dick and gradually take it in my mouth – up and down, up and down, getting it wetter and tightening my lips around it. I twist my hand around it as my mouth goes up, then back down over and over.

Breathing heavily, you moan as you put your hand on the back of my neck and I take you into my mouth even deeper. Then you hold my waist and lay me on my back and kiss and caress me. Then you stick your dick slowly in my tight wet pussy. I gasp as it goes inside me. Slowly you start to grind-up and down, gradually getting quicker.

I moan and breathe loudly until I whisper. "Fuck me! Oh fuck me!" You fuck me faster and harder, and I scream louder and louder. Sweat drips off your forehead. Your back feels strong and sweaty. Our skin slaps against each other as the sweat, heat, breathing and moaning continue. As you fuck me harder and keep digging it in, I scream over and over, "I'm gonna come!"

I let out a huge moan as my pussy gets wetter and tightens around your dick. "Oh fuck", you say, "you feel so fucking good." You let out a big moan as you come deep inside my pussy. Then you fall down beside me with exhaustion. Your breath still heavy, my heart still racing. Sweat is all over us. You turn and face me as we kiss and breathe panting from the amazing sex.

Adapted from: *Penthouse Letters* (2008, August). To sleep, perchance to dream-and maybe to get royally screwed, 26 (8), 70-71.

Appendix F: Neutral Story

You are grocery shopping. You get a cart and go to the produce section where you get some bananas, oranges, and apples. You pick out some red and yellow peppers. You get some zucchini and tomatoes. You add some spinach and carrots to your cart. You get some potatoes, onions, and garlic. Then you get some cheese, bread, and meat. It's a bit crowded by the juice and milk section so you leave that for later. You pick up some toilet paper. You're also running low on paper towels, so you get some. You get some light bulbs and garbage bags. You also need laundry detergent, so you pick some up.

You get some rice and pasta. You pick up some beans. You get some cereal and maple syrup. You buy some pop. You go back to get some juice and milk. You also get some eggs. You get some frozen lunches. You pick up some yogurt and ice cream.

You get into the shortest checkout line you can see. There are two people in front of you. After waiting for a few minutes, you realize you need cooking oil. You leave your cart in the line and go pick up some cooking oil. You get back to your cart and the line hasn't moved much. You push your cart a bit forward to be closer to the person in front of you. While waiting, you scan the many magazines on the racks and read some of the headlines. You look at the chocolate bars and consider buying one, but decide against it. You take a pack of gum from the rack.

There is now some space on the conveyor belt for your groceries. You put the divider down and begin to load your groceries onto the belt. You wait for a minute until the belt moves forward and you load more of your groceries on. You say hello to the cashier. She says hello back. You have now loaded all your groceries onto the belt and you push your cart through to the other side to start bagging and packing up your groceries. The cashier finishes ringing everything through after you've placed on bag into your cart. She tells you the price and you pay her. She then helps you bag the groceries and you put everything in your cart. You push your cart towards the exit and leave the store.

Appendix G: Pilot Testing and Study Proper Consent Form

Sexual Arousal and Attitudes towards Rape

A consent form tells you what we want you to do as a participant and allows you to make an informed decision about whether you want to participate or not. Consent forms also list any potential bad consequences and they tell you who to contact in case you have any questions or concerns after the research is finished or in case you have any questions or concerns that cannot be answered by the researcher.

The purpose of this study is to find out what men convicted of sex offences and men who have not been convicted of sex offences think about rape. Participation takes about an hour and a half. You will be asked to answer some questions about rape and your criminal history, complete some grouping tasks, and listen to some stories. One of the stories may describe you having sex with a woman. The stories and questions may be embarrassing or offensive because of their explicit detail, the words used, and the topics covered. You are free to stop the project at any time, not participate, and refuse to answer any of the questions **without penalty**. Not participating will **NOT** affect your treatment by CSC in any way. Participation in this study will **NOT** affect any administrative decisions concerning you, such as your institutional placement or parole.

We also want you to let us review information about your criminal history, psychological assessments, and programs in your institutional files. This information will be used by the researchers to see if there is a relationship between specific file information and the measures completed in the present study. Your file information will be accessed for the current study and for follow-up studies up to a maximum of 10 years from now.

The contents of your files and your answers will be used only for research purposes and your confidentiality will be respected and protected, meaning your answers and file information will not be shared with anyone outside of the research project. The information you provide will **NOT** be shared with Correctional Service Canada (CSC) staff or put on any institutional file. Confidentiality **will only** be broken if a direct and imminent threat is made to hurt yourself or others or if a specific abuse of another person is disclosed. You will not be identified as a participant in the publication or presentation of the results. Your name, FPS number, and other personal information will **NOT** be written on the information you provide to protect your confidentiality.

The information you provide will be accessed for the current study and for follow-up studies up to a maximum of 10 years from now. The information collected will be kept in a secure manner at Carleton University for a period of 10 years in a locked filing cabinet and password-protected computer and will be accessible only to the researchers working on this research.

The present study is being conducted by Chantal Hermann (Master of Arts student, Department of Psychology, Carleton University, 613-613-520-2600 ext. 2649; chermann@connect.carleton.ca) under the supervision of Dr. Kevin Nunes (Assistant Professor, Department of Psychology, Carleton University, 613-520-2600, ext 1545; kevin_nunes@carleton.ca). If you have any questions or concerns about this study please contact Chantal Hermann or Kevin Nunes. If you are concerned about ethics or have any other concerns about this study, please contact Monique Sénéchal, Chair of the Carleton University Ethics Committee for Psychological Research (613-520-2600, Ext. 1155, monique_senechal@carleton.ca) or Dr. Janet Mantler, Chair of the Psychology Department (613-520-2600, ext. 4173; psychchair@carleton.ca).

This study has been approved by the Carleton University Ethics Committee for Psychological Research.

I have read and understood the information above. My signature indicates that I agree to participate in this study. There are two copies of the consent form, one of which I may keep.

Participant Signature: _____

Date: _____

Experimenter Signature: _____

Date: _____

Appendix H: Debriefing Form for Pilot Testing and Study Proper

Thank you very much for participating in my study. Without your participation, this research would not have been possible. I hope the following information answers any questions and concerns you may have.

What is sexual assault?

Sexual assault usually involves verbal threats or physical force in order to carry out sexual acts or to get sexual pleasure. Forcing a woman to do sexual things, such as have sex, when she does not want to is a crime that causes serious problems for both the man and the woman. For the man, one of the main problems is going to prison. For the woman, some of the problems that are linked with being sexually assaulted are anxiety, depression, and relationship problems, not to mention worries about sexually transmitted diseases and pregnancy. In sum, forcing sexual activity on a woman against her will not only hurts her, but can also hurt the man.

What Are We Trying to Learn in this Research?

The grouping task, which is called the Implicit Association Test (IAT), and some of the questionnaires you completed were designed to measure attitudes towards rape. We are trying to find out if men who are in prison for sexual assault view rape more positively than men who are not in prison for sexual assault. We also want to see if sexual arousal changes attitudes towards rape. Participants hear one of two stories. One story is meant to be sexually arousing and the other story is meant to be neutral; that is, to not be sexually arousing. To answer our questions, we will compare the average responses of participants before they hear a story to the average responses after they hear a story.

Why Is This Important to Scientists or the General Public?

Sexual assault is a serious violation that has many negative consequences for victims. It has been suggested that what people think influences their behaviour. As such, finding out more about how men think about sexual assault can help us to better understand why men commit sexual assault and, ultimately, how to reduce this harmful behaviour.

What if I Have Questions Later?

The present study is being conducted by Chantal Hermann (Master of Arts student, Department of Psychology, Carleton University, 613-613-520-2600 ext. 2649; chermann@connect.carleton.ca) under the supervision of Dr. Kevin Nunes (Assistant Professor, Department of Psychology, Carleton University, 613-520-2600, ext 1545; kevin_nunes@carleton.ca). If you have any questions or concerns about this study please contact Chantal Hermann or Kevin Nunes. If you are concerned about ethics or have any other concerns about this study, please contact Monique Sénéchal, Chair of the Carleton

University Ethics Committee for Psychological Research (613-520-2600, Ext. 1155, monique_senechal@carleton.ca) or Dr. Janet Mantler, Chair of the Psychology Department (613-520-2600, ext. 4173; psychchair@carleton.ca). This study has been approved by the Carleton University Ethics Committee for Psychological Research.

Is There Anything I Can Do if I Found This Experiment to be Emotionally Draining?

If you experience any distress (e.g., mad or sad) as a result of this study, please seek help from one of the psychologist. Thank you very for making this research possible.

Appendix I: Script for Pilot Testing and Study Proper

Obtaining Informed Consent:

Hi. Are you here for the experiment? Great. What is your name? Please have a seat. My name is Chantal. Thank you very much for coming in today. I'm going to tell you briefly about what you will be asked to do for this study and then, if you would like to participate, I'll ask you to read and sign two copies of the consent form.

For this study, you will be asked to answer some questions about sexual arousal and rape, complete some grouping tasks, and listen to some stories. The stories may describe you having sex with a woman. The stories and questions may be embarrassing or offensive because of their explicit detail, language, and subject. You are free to withdraw from the project at any time, refuse to participate, and refuse to answer any of the questions **without penalty**. Participation in this study takes about an hour. You are also asked if it is okay for us to look at information from your files, such as your criminal record, intake assessment, and psychological assessment information.

Your answers and file information will be used only for research purposes and your confidentiality will be respected and protected, meaning your answers will not be shared with anyone outside of the research project. The information you provide will **NOT** be shared with Correctional Service Canada (CSC) staff or put on any institutional file. Confidentiality **will only** be broken if a direct and imminent threat is made to hurt yourself or others or if a specific abuse of another person is disclosed. You will not be identified as a participant in the publication or presentation of the results. Your name, FPS number, and other personal information will **NOT** be written on the information you provide to protect your confidentiality.

The information you provide will be accessed for the current study and for follow-up studies up to a maximum of 10 years from now. The information collected will be kept in a secure manner at Carleton University for a period of 10 years in a locked filing cabinet and password-protected computer and will be accessible only to the researchers working on this research. Are you willing to participate?

OK, great. I'll ask you to read the consent form and, if you want to participate, please sign it.

There are two copies of the consent form, one for you and one for me to keep. Please sign both.

Pilot Testing and Study Proper Instructions:

OK, thank you. Now I'm going to give you a more detailed overview of the procedure and then you'll be ready to begin. This research is for my thesis, so it's important that you try to respond as honestly and accurately as possible.

Everything you will be asked to do today will be on this laptop computer. When you begin the study, you will be sitting in front of the computer. Instructions will be shown on the screen. Once you have read all the instructions on a screen, you can move to the next screen by pressing the spacebar. Then you will be asked to press different keys to indicate your responses on the different tasks. You will be asked a number of questions that you can answer by pressing certain numbers on the keyboard. Please feel free to take your time responding to these questions; they are not timed so you don't have to rush.

You will also be asked to do some grouping tasks. For these tasks, you will be asked to indicate your responses by pressing either "d" with your left index finger or "k" with your right index finger. **(Demonstrate by holding both fingers out as if they were poised over the "d" and "k" keys.)** The grouping tasks are timed, so please try to go as quickly as you can while also trying to be as accurate as you can.

Once you have finished the study, a screen will appear telling you that you have completed the entire procedure. When you see this screen, please let me know.

Do you have any questions now?

OK, I'll ask you to take a seat in front of the computer. So you're all ready to go. As I said, just follow the instructions on the screen and don't hesitate to ask if you have any questions.

Debriefing:

Thank you again for taking the time to come in and participate in our study. Without people like you we would not be able to do this research. So thank you very much.

If you found any of the questions disturbing, you should contact the psychologist.

Do you have any questions or comments?

OK. Thank you very much. Have a good day/night.

Appendix J: Coercive Sexuality Scale (CSS)

Held a female's hand against her will?

Kissed a female against her will?

Placed your hand on a female's knee against her will?

Placed your hand on a female's breast against her will?

Placed your hand on a female's thigh or crotch against her will?

Unfastened a female's clothing against her will?

Removed a female's outer clothing against her will?

Removed a female's underclothing against her will?

Made a female remove her own underclothing against her will?

Touched a female's genital area against her will?

Had sexual intercourse with a female against her will?

Attempted to verbally convince a female to have sex?

Ignored a female's protests before or during sex?

Used verbal threats (i.e., I will leave you if you don't) to try to get sex from a female?

Used physical restraint with a female to get sex from her?

Used threats of aggression (i.e., I will hurt you . . . beat you . . . cause physical pain) with a female to get sex from her?

Used physical aggression with a female to get sex from her?

Threatened to use a weapon on a female to get sex from her?

Used a weapon on a female to get sex from her?

Appendix K: Likelihood to Rape Scale

How likely is it that you would commit rape if you would not get caught and/or punished?

1 = Not at all likely

2

3

4

5= Very Likely

Appendix L: Sexual Coercion Analogue

It's evening and you're leaving the shopping mall. You walk to the elevator. There is an attractive woman already waiting there. You do not know each other, but you smile at her and she smiles back at you. You make a joke about shopping and she laughs. The elevator arrives and takes you to the ground floor, where you both exit. You are both walking the same way, so you start chatting about the mall and the weather. She is friendly and nice to talk with. You introduce yourselves. Her name is Jane. You continue to walk with her away from the mall. After about 10 minutes, you get to a secluded parking lot and Jane says that she is parked there and she wishes you a good night. Before she walks away, you ask her for her phone number. She politely says that she doesn't give out her phone number to strangers.

Do you:

- A) Try to convince her to give you her number
- B) say good night and walk away

If B, end.

If A, then:

You tell her that you're not a stranger, pointing out that you now know each others' names and that you've gotten to know each other on your walk from the mall. You ask her for her number again, telling her that she won't regret giving it to you. You tell her that you'll take somewhere nice and show her a good time. She again politely says that she doesn't give her number out and turns to walk towards her car.

Do you:

- A) put your arm around her and walk her to her car
- B) leave

If B, end.

If A, then:

You walk up beside her and put your arm around her. You walk like that for a couple of steps until she pulls away from you. You are now both at her car. She unlocks her car and places her shopping bag on the back seat.

Do you:

- A) take her in your arms and kiss her before she gets in the car?
- B) Walk away

If B, end.

If A, then:

As she turns around after placing her bag on the back seat, you step towards her, put your arm around her waist, pull her to you, and kiss her deeply. She tries to pull away from you and tells you to stop.

Do you:

- A) continue to hold her and kiss her
- B) stop kissing her and walk away

If B, end.

If A, then:

Despite her protests, you continue to hold her tight and kiss her. You move her up against the car. She is struggling trying to get away from you. She's trying to tell you to stop, but she can't because you are kissing her so much.

Do you:

A) move her into the back seat of her car

B) walk away

If B, end.

If A, then:

You move her into the back seat of her car and get on top of her. You're touching and squeezing her all over while you continue to kiss her. She is crying. She is begging for you to stop. She asks you to please leave her alone. She says please don't do this.

Do you:

A) take off her clothes

B) get off her and walk away

If B, end.

If A, then:

You unbutton her blouse and take off her bra. You lift up her skirt and pull down her panties. She is still crying. She is screaming for help. Someone please help!, she screams. Police!, she screams. She is trying to get away from you but you have her arms pinned and the weight of your body is holding her down.

Do you:

- A) put your penis inside her mouth, vagina, or anus
- B) get off her and walk away

END

6

How positive or negative would this outcome be for you if it did happen?

Very negative			Neutral		Very positive	
-3	-2	-1	0	1	2	3

Outcome #2 _____

How likely is it that this outcome would happen?

Never happen			Might happen		Guaranteed to happen	
0	1	2	3	4	5	6

How positive or negative would this outcome be for you if it did happen?

Very negative			Neutral		Very positive	
-3	-2	-1	0	1	2	3

Outcome #3 _____

How likely is it that this outcome would happen?

Never happen				Might happen				Guaranteed to happen
0	1	2	3	4	5	6		

How positive or negative would this outcome be for you if it did happen?

Very negative				Neutral				Very positive
-3	-2	-1	0	1	2	3		

Appendix N: Coding Manual

Participant number (from Participant List)	CHANTAL	IAN	RIKKI
Participant's date of birth			
Institution at which participant was tested		Coder's name:	

Offender's Race (can code from Physical Characteristics in Offender Admission Form in Sentence Management file)

- 1 = Caucasian
- 2 = Asian
- 3 = Inuit
- 4 = North American Indian
- 5 = Metis
- 6 = Black
- 7 = Other; specify

Height _____ cm Need for translator: YES NO

Home language: English Other (specify) _____

Preferred language: English Other (specify) _____

Length of aggregate sentence for index offence(s) (write in years, months, and/or days).

_____ or _____ life/indeterminate sentence (e.g., Dangerous Offender)

Warrant Expiry Date _____

INDEX CONVICTIONS

CPIC available?		Date on CPIC	
------------------------	--	---------------------	--

Only consider index offences that resulted in conviction in your coding below (categories are mutually exclusive).

Index offence convictions	Number	Date of offence	Date of charge/arrest	Date of conviction
Sex offence convictions (in name or deed)		1 st ; Most recent:	1 st ; Most recent:	1 st ; Most recent:
Non-sexual violent convictions		1 st ;	1 st ;	1 st ;
Non-sexual and non-violent convictions		1 st ;	1 st ;	1 st ;

SUMMARY OF INDEX SEX OFFENCE CONVICTION INFORMATION

Any contact sex offences	YES	NO
Number of female victims		
Number of male victims		
Age of youngest victim		
Age of oldest victim		
Relationship with victims		

PRIOR CONVICTIONS

Only consider prior offences that resulted in conviction in your coding below.

Prior offence convictions	Number	Date of 1st conviction
Sex offence convictions (in name or deed)		

Non-sexual violent convictions		
Non-sexual and non-violent convictions		

PRIOR SEX OFFENCE CONVICTION DETAILS

Any contact sex offences	YES	NO
Number of female victims		
Number of male victims		
Age of youngest victim		
Age of oldest victim		
Relationship with victims		

Any sex offences at all (self-reported, charges, convictions, prior, or current)? **YES** **NO**

The Screening Scale for Pedophilic Interests (SSPI)

Score the SSPI from information gathered above and/or refer back to information in files. Score only for offenders with any (index or priors) victims 13-years-old or younger.

- Using all sexual offence histories (both index and prior offences), score the following items and sum them to compute the total score.

____ (1) Offender has male victim.

Yes = 2 No, female victims only = 0

____ (2) Offender has more than one victim.

Yes = 1 No, single victim only = 0

____ (3) Offender has a victim aged 11 or younger.

Yes = 1 No, child victims were 12 or 13 years old = 0

____ (4) Offender has an unrelated victim.

- (a child who was not the offender's son or daughter, stepson or stepdaughter, or a member of his extended family up to and including first cousins).

Yes = 1 No, related victims only = 0

____ (5) TOTAL SCORE (score items 1 to 4)

EDUCATION

Highest grade completed (high school or elementary school)	
Took college courses?	Yes No
Completed college degree?	Yes No
Took undergraduate university courses?	Yes No
Completed undergraduate university degree?	Yes No
Took graduate (MA, PhD) courses?	Yes No
Completed graduate degree?	Yes No

SIR-R1 completed?	SIR-R1 total score	SIR-R1 risk category	Date SIR-R1 was completed

Marital status on date of index offence

- *Indicate the category that best describes the subject's marital status on the date he committed the index offence.*
 - *If the index offence includes more than one offence, indicate his marital status on the date of the first of these.*
- 1=single (i.e., never lived with a romantic partner for at least 1 year)
- 2=common-law relationship (living together at least 1 year)
- 3=married
- 4=separated/divorced from wife
- 5=separated from common-law wife
- 6=widower
- 7=homosexual relationship (living together/married at least 1 year)
- 8=other; specify _____

Number of biological children _____

Number of biological children he has raised or helped to raise _____

Number of step or adopted children he has raised or helped to raise _____

RISK ASSESSMENT SCALES SCORED AT INTAKE ASSESSMENT AT MILLHAVEN ASSESSMENT UNIT (MAU). Code scores and total scores for all measures below available - most likely in Psychology files. These measures will only be available for sex offenders.

Date of scoring: _____ Location of scoring: _____

Question Number	Risk Factor	Codes	Score
1	Young	Aged 25 or older	0
		Aged 18 - 2499	1
2	Ever Lived With	Ever lived with lover for at least two years?	
		Yes	0
		No	1
3	Index non-sexual violence - Any Convictions (S9903)	No	0
		Yes	1
4	Prior non-sexual violence - Any Convictions (S9905)	No	0
		Yes	1
5	Prior Sex Offences	Charges	Convictions
		None	0
		1-2	1
		3-5	2
		6+	3
6	Prior sentencing dates (excluding index) (S9902)	3 or less	0
		4 or more	1
7	Any convictions for non-contact sex offences (S9903)	No	0
		Yes	1
8	Any Unrelated Victims (S9906)	No	0
		Yes	1
9	Any Stranger Victims (S9907)	No	0
		Yes	1
10	Any Male Victims (S9908)	No	0
		Yes	1
	Total Score	Add up scores from individual risk factors	

STABLE-2007 Tally Sheet – MAU ASSESSMENT

Place of Scoring: _____

Date of Scoring: _____

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		
<p><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.</p> <p>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"</p>		
Co-operation with Supervision		
Sum for Final Total (Out of 24 for those without a child victim)		<u>26</u>

MAU ASSESSMENT

STABLE-2000 Tally Sheet

Score each of the following 6 major areas. In sections 2, 3, 4, 6, the sub-section that gets the highest score is the score for the whole section.

Date of scoring: _____ **Location of scoring:** _____

1. Significant Social Influences
(See Page 7 of Stable coding manual for instructions)

--

2. Intimacy Deficits

- Lovers/Intimate Partners
- Emotional Identification with Children
- Hostility toward Women
- General Social Rejection/Loneliness
- Lack of Concern for Others

--	--	--	--	--

3. Sexual Self-regulation
Sex Drive/Pre-occupation
Sex as Coping
Deviant Sexual Interests

--

--	--	--

4. Attitudes Supportive of Sexual Assault
Sexual Enticement
Rape Attitudes
Child Molester Attitudes

--

--	--	--

5. Co-operation with Supervision

6. General Self-regulation
Impulsive Acts
Poor Cognitive Problem Solving Skills
Negative Emotionality/Hostility

--

--	--	--

Total the six large boxes for Total Score

12

PHALLOMETRIC ASSESSMENT OF INTEREST IN CHILDREN

MAU PPG assessment of interest in CHILDREN conducted? Yes No

Date of PPG assessment: _____ Location of PPG assessment: _____

Indicate if offender was judged to be faking or if the responses were considered too low for valid interpretation. Circle all that apply:

Faking Low-responder Non-responder

MAU PPG raw data available? Yes No If “yes”, copy in the values from the PPG results table into the table below.

			COLUMN 4	COLUMN 5	COLUMN 9
Index	# of Trials	Category	Mean B... (Mean Baseline)	Mean Pe... (Mean Peak)	Mean Z(P... (Mean z-score [Peak – Baseline])
Category 1	3	warmup			
Category 2	2	adult female consent			
Category 3	2	pass pre-pub female			
Category 4	2	sex vio pre-pub female			
Category 5	2	non-sex vio pre-pub fem...			
Category 6	2	sex vio pre-pub male			
Category 7	2	coerce pre-pub female			

Category 8	2	neutral				
Category 9	2	non-sex vio pre-pub male				
Category 10	2	coerce pre-pub male				
Category 11	2	pass pre-pub male				
Category 12	2	adult male consent				

PHALLOMETRIC ASSESSMENT OF INTEREST IN RAPE

MAU PPG assessment of interest in RAPE conducted? Yes No

Date of PPG assessment: _____ Location of PPG assessment: _____

Indicate if offender was judged to be faking or if the responses were considered too low for valid interpretation (from MAU Psychological Assessment Report). Circle all that apply:

Faking Low-responder Non-responder

MAU PPG raw data available? Yes No If “yes”, copy in the values from the PPG results table into the table below.

			COLUMN 4	COLUMN 5	COLUMN 9
Index	# of Trials	Category	Mean Base (Mean Baseline)	Mean Peak (Mean Peak)	Mean Z(P-B) (Mean z-score [Peak – Baseline])
Category 1	2	Non Sexual Violence Robbery			
Category 2	2	Sexual Rape			
Category 3	2	Neutral			
Category 4	2	Anger Rape			
Category 5	2	Consent Partner Initiates			
Category 6	2	Non Sexual Violence Anger			
Category 7	2	Consent Narrator Initiates			

IF MORE RECENT ASSESSMENTS ON STATIC-99, STABLE-2007/2000 AND PPG ARE AVAILABLE SINCE INTAKE ASSESSMENT AT MAU, ALSO CODE MOST RECENT ASSESSMENT SCORES BELOW. These are most likely found in post-treatment for pre-treatment if program not completed measures with the program reports in Psychology files) Date of scoring: _____ Location of scoring: _____

STATIC-99 Coding Form

Question Number	Risk Factor	Codes	Score
1	Young	Aged 25 or older	0
		Aged 18 – 24.99	1
2	Ever Lived With	Ever lived with lover for at least two years?	
		Yes	0
		No	1
3	Index non-sexual violence - Any Convictions (S9909)	No	0
		Yes	1
4	Prior non-sexual violence - Any Convictions (S9905)	No	0
		Yes	1
5	Prior Sex Offences:	Charges	Convictions
		None	None
		1-2	1
		3-5	2
		6+	3
		3 or less	0
		4 or more	1
6	Prior sentencing dates (excluding index)	No	0
		Yes	1
7	Any convictions for non-contact sex offences (S9903)	No	0
		Yes	1
8	Any Unrelated Victims (S9906)	No	0
		Yes	1
9	Any Stranger Victims (S9907)	No	0
		Yes	1
10	Any Male Victims (S9908)	No	0
		Yes	1
	Total Score:	Add up scores from individual risk factors	

STABLE-2007 Tally Sheet – MOST RECENT ASSESSMENT

Place of Scoring: _____

Date of Scoring: _____

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)		<u>26</u>

MOST RECENT ASSESSMENT**STABLE-2000 Tally Sheet**

Score each of the following 6 major areas. In sections 2, 3, 4, 6, the sub-section that gets the highest score is the score for the whole section.

Date of scoring: _____	Location of scoring: _____
1. Significant social influences (See Page 7 of Stable coding manual for instructions)	<div style="border: 1px solid black; width: 60px; height: 40px; margin-left: 100px;"></div>
2. Intimacy Deficits Lovers/Intimate Partners Emotional Identification with Children Hostility toward Women General Social Rejection/Loneliness Lack of Concern for Others	<div style="display: flex; align-items: center; justify-content: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="font-size: 2em; margin: 0 10px;">}</div> <div style="border: 1px solid black; width: 60px; height: 40px; margin-left: 10px;"></div> </div>
3. Sexual Self-regulation Sex Drive/Pre-occupation Sex as Coping Deviant Sexual Interests	<div style="display: flex; align-items: center; justify-content: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="font-size: 2em; margin: 0 10px;">}</div> <div style="border: 1px solid black; width: 60px; height: 40px; margin-left: 10px;"></div> </div>
4. Attitudes Supportive of Sexual Assault Sexual Entitlement Rape Attitudes Child Molester Attitudes	<div style="display: flex; align-items: center; justify-content: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="font-size: 2em; margin: 0 10px;">}</div> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 60px; height: 40px;"></div> <div style="border: 1px solid black; width: 60px; height: 40px;"></div> </div> </div>
5. Co-operation with Supervision	<div style="display: flex; align-items: center; justify-content: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="font-size: 2em; margin: 0 10px;">}</div> <div style="border: 1px solid black; width: 60px; height: 40px; margin-left: 10px;"></div> </div>
6. General Self-regulation Impulsive Acts Poor Cognitive Problem Solving Skills Negative Emotionality/Hostility	<div style="display: flex; align-items: center; justify-content: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="font-size: 2em; margin: 0 10px;">}</div> <div style="border: 1px solid black; width: 60px; height: 40px; margin-left: 10px;"></div> </div>
Total the six large boxes for Total Score	<div style="border: 1px solid black; width: 80px; height: 60px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="font-size: 2em; font-weight: bold;">12</div> </div>

PHALLOMETRIC ASSESSMENT OF SEXUAL INTEREST IN CHILDREN – MOST RECENT ASSESSMENT

More recent PPG assessment of interest in **CHILDREN** conducted? Yes No

Date of PPG assessment: _____ Location of PPG assessment: _____

Indicate if offender was judged to be faking or if the responses were considered too low for valid interpretation. Circle all that apply:

Faking Low-responder Non-responder

PPG raw data available? Yes No If “yes”, copy in the values from the PPG results table into the table below.

			COLUMN 4	COLUMN 5	COLUMN 9
Index	# of Trials	Category	Mean B... (Mean Baseline)	Mean Pe... (Mean Peak)	Mean Z(P... (Mean z-score [Peak – Baseline])
Category 1	3	warmup			
Category 2	2	adult female consent			
Category 3	2	pass pre-pub female			
Category 4	2	sex vio pre-pub female			
Category 5	2	non-sex vio pre-pub fem...			
Category 6	2	sex vio pre-pub male			
Category 7	2	coerce pre-pub female			

Category 8	2	neutral			
Category 9	2	non-sex vio pre-pub male			
Category 10	2	coerce pre-pub male			
Category 11	2	pass pre-pub male			
Category 12	2	adult male consent			

PHALLOMETRIC ASSESSMENT OF INTEREST IN RAPE – MOST RECENT ASSESSMENTMore recent PPG assessment of interest in **RAPE** conducted? Yes No

Date of PPG assessment: _____ Location of PPG assessment: _____

Indicate if offender was judged to be faking or if the responses were considered too low for valid interpretation. Circle all that apply:

Faking Low-responder Non-responder

PPG raw data available? Yes No If “yes”, copy in the values from the PPG results table into the table below.

			COLUMN 4	COLUMN 5	COLUMN 9
Index	# of Trials	Category	Mean Base (Mean Baseline)	Mean Peak (Mean Peak)	Mean Z(P-B) (Mean z-score [Peak – Baseline])
Category 1	2	Non Sexual Violence Robbery			
Category 2	2	Sexual Rape			
Category 3	2	Neutral			
Category 4	2	Anger Rape			
Category 5	2	Consent Partner Initiates			
Category 6	2	Non Sexual Violence Anger			

Category 7	2	Consent Narrator Initiates			
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