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The Offence Progression in Sexual Offenders: An Examination of the Self-Regulations Model of the Offence Process

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Running head: The Offence Progression and Sexual Offending

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Abstract

The self-regulation model is an offence process model designed specifically for sexual offenders. It was developed as a result of theoretical and practical problems with the traditional relapse prevention approach to sexual offender treatment and from empirical evidence identifying variability in the offence chain among sexual offenders. The self-regulation model is a nine-phase process with four distinct pathways to sexual offending that represent the combination of offence-related goals (approach versus avoidance) and self-regulatory strategies selected to achieve the goal (passive/automatic versus active/explicit). In the present study, I evaluated the validity and utility of the self-regulation model in a sample of 275 adult male sexual offenders treated within the Correctional Service of Canada (CSC). First, the concurrent validity of the study variables utilized as part of the overall assessment battery was examined in order to elucidate the relationships among the various treatment needs targeted by the CSC's sexual offender programs. Following this, differences among individuals following diverse self-regulation pathways were investigated, as was, within-treatment change following participation in CSC's sexual offender programs. Results showed that self-regulation pathway was differentially associated with risk to re-offend and several treatment needs. Finally, in terms of post-treatment change, moderate to large sized improvements were noted for dynamic risk assessment measures as well as several self-reported treatment targets. These changes were, in some cases, differentially associated with self-regulation pathway, suggesting that offence pathway is a clinically relevant variable when evaluating treatment change and in conceptualizing sexual offender treatment. Implications of these findings for the effective assessment and rehabilitation of sexual offenders are discussed.

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Table of Contents

List of Tables

List of Figures

The Offence Progression in Sexual Offenders: An Examination of the Self-Regulation Model of the Offence Process

Sexual assault against adults and children is a serious and growing public health concern (Laws, 2003a; Mercy, 1999). Given the rates of sexual victimization (Elliott, Mok, & Briere, 2004; Finkelhor, Hotaling, Lewis, & Smith, 1990), along with the impact sexual violence has on the victims, increased attention has focused on the perpetrators of sexual aggression, resulting in substantial increases in the sexual offender population within correctional settings (Becker & Murphy, 1998; Motiuk & Belcourt, 1996). However, punitively based sanctions have been correlated with increased rates of recidivism in offenders (Andrews & Bonta, 1998; Gendreau & Goggin, 1996) and, as such, effective correctional treatment is crucial.

The utility of sexual offender treatment has been debated and various outcome studies have produced equivocal results (Hanson, et al., 2002; Marshall, Jones, Ward, Johnson, & Barbaree, 1991; Quinsey, Khanna, & Malcolm, 1998; Rice & Harris, 2003). Nevertheless, programs have evolved over the years in accordance with the literature pertaining to what works with specific populations (Abel, et al., 1984). Early programs focused primarily on the eradication of deviant sexual preference (Laws & Marshall, 2003; Schwartz, 2003); however, contemporary programs have become multifaceted and target a range of factors that are associated with sexual aggression (Yates, 2002).

Most sexual offender treatment programs adopt a cognitive-behavioural approach and, as such, emphasize the role of, and interrelationships between, cognition, affect, and behaviour. Consequently, an important element of the therapeutic process has been the

development of the offence chain in order to identify the affective, behavioural, cognitive, and contextual factors that culminate in the occurrence of a sexual offence for a specific offender (Marshall, Anderson, & Fernandez, 1999). There have been numerous attempts to describe the various elements within the offence chain (Pithers, 1990, 1991; Salter, 1995; Wolf, 1984), although the most popular with sexual offenders has been the relapse prevention (RP) model (Pithers, 1990; Pithers, Marques, Gibat, & Marlatt, 1983).

RP was derived from social learning theory (Bandura, 1986) and was designed as a post-treatment maintenance strategy to maintain acquired behaviour change. Despite the overwhelming acceptance of this framework with sexual offenders, there has been little empirical support for its applicability with this population and numerous limitations have been identified (Laws, 2003b; Ward & Hudson, 1996). Consequently, a new model of the sexual offence process has been proposed, based on self-regulation theory (Baumeister & Heatherton, 1996; Karoly, 1993). The self-regulation model of sexual offending (Ward & Hudson, 1998, 2000) is an offence process model which includes the cognitive, behavioural, affective, and contextual factors that lead to the occurrence of a sexual offence. The model was designed to account for the diversity of sexual offending and to better describe the offence process, without the limitations inherent in the RP model.

This review will provide descriptions of current sexual offender treatment and the original RP model for addictive behaviours. Following this, the RP model adapted for sexual offenders will be described, as will the support and criticisms of the model. Finally, the self-regulation model will be illustrated.

The Treatment of Sexual Offenders

Recently, there has been a proliferation of programs designed specifically for sexual offenders (Becker & Murphy, 1998; Freeman-Longo, Bird, Stevenson, & Fisk, 1995). Moreover, the content and focus of programs have changed over time in accordance with theoretical and empirical investigations pertaining to effective clinical practice.

Cognitive-behavioural theory and the risk/need/responsivity model have served as predominant interventions used with offender populations, including sexual offenders (Andrews & Bonta, 1998; Marshall, et al., 1999; Ward, Messler, & Yates, 2007). Cognitive-behavioural treatment is based on social learning theory (Bandura, 1986) and emphasizes the importance and interrelationship of cognitive processes, affect, and behaviour. In treatment using this model, maladaptive thoughts are challenged and pro-social behaviour is modeled. Rehearsal of these behaviours and reinforcement of behaviour change is essential in order for the modifications to become entrenched. Specifically, interventions focus on the factors that are specific to the offender and are related to future sexual offending (i.e., criminogenic needs). Such needs may include deviant sexual arousal, cognitive distortions, intimacy deficits, and empathy (Yates, et al., 2000).

Within cognitive-behavioural theory, the risk/need/responsivity model (Andrews & Bonta, 1998) has been instrumental in treating correctional populations. According to this model, the principles of effective correctional intervention (i.e., risk, need, and responsivity) must be followed to ensure the greatest likelihood of therapeutic success. The risk principle indicates that treatment success is most likely when the intensity of treatment and supervision is matched to the risk level posed by an offender. That is, higher risk offenders should be participating in higher intensity treatment programs and lower risk offenders should receive low intensity treatment or no treatment. The need principle posits that

treatment should target criminogenic needs that have been associated with offending both empirically and for a specific offender and that can be modified through intervention (e.g., substance abuse, criminal thinking). The responsivity principle indicates that treatment must be delivered in a manner that is consistent with the learning style, abilities and personality profile of the offender (Andrews & Bonta, 1998). Importantly, treatment delivered in accordance with this model has demonstrated positive results for a variety of offender groups (Dowden & Andrews, 1999; Ward et al., 2007). Within the risk/need/responsivity and cognitive-behavioural models, RP has served as the predominant offence process model associated with sexual offender treatment (Marshall & Laws, 2003).

The Relapse Prevention Offence Process

The RP model was originally developed as a maintenance program for alcoholic patients who were motivated for treatment (Marlatt, 1982). The model includes the various cognitive, affective, and contextual factors that may subsequently lead to the recurrence of an undesired act (e.g., alcohol abuse). RP makes a key distinction in the offence cycle between a lapse, which is defined as the initial recurrence of behaviour (e.g., a sip of alcohol) and a relapse, which is the return to baseline levels of addictive behaviour. The process begins with the assumption that an individual is in a perceived state of control and abstinence. This period of abstinence, which is accompanied by feelings of self-efficacy regarding the ability to control the addictive behaviour, continues until the individual encounters a high risk situation (HRS), that is, a circumstance that threatens the ability to maintain control. Research has indicated that relapses within the addictive disorders typically follow three types of HRS: negative emotional states, social pressure, or interpersonal conflict (Cummings, Gordon, & Marlatt, 1980; Marlatt, 1985).

According to Marlatt (1982), the HRS is preceded by a number of covert events. First, a lifestyle imbalance is experienced by the individual when the external demands or obligations outweigh the positive factors in the person's life. This disparate lifestyle can create feelings of deprivation and a desire for immediate gratification. Affective states such as urges and cravings for the immediate pleasurable effects of the substance are experienced, along with particular cognitive distortions (e.g., denial and rationalization), which function as defence mechanisms and permit the covert planning of the relapse episode. The final antecedent to a HRS, as shown in the model, is a series of small, covert decisions known as apparently (or seemingly) irrelevant decisions. These are a series of approach behaviours which bring the individual closer to a HRS and serve to remove self-perceived responsibility if a lapse should occur. For example, an ex-alcoholic who chooses to attend a bar "just to play pool," is engaging in behaviours that appear relatively harmless but that serve to bring the individual into a HRS (George & Marlatt, 1989; Marlatt, 1985).

According to the model, a person is particularly vulnerable to lapsing when encountering a HRS (Marlatt, 1982, 1985). An individual who implements an effective coping strategy during this critical phase substantially diminishes the likelihood of relapse and subsequently experiences increased self-efficacy regarding the ability to maintain abstinence in the future. If, however, the individual lacks appropriate coping strategies, or utilizes maladaptive strategies, then the HRS is not appropriately managed. Consequently, there is a sense of decreased self-efficacy along with increased hopelessness regarding the ability to maintain control. The problem of immediate gratification is an important mechanism at this stage. It is here that the individual focuses predominantly on the immediate pleasurable outcomes of the activity, as opposed to the longer-term negative

consequences. Although there is an initial sense of elation during the lapse, this is subsequently followed by the biphasic effect (George & Marlatt, 1989), where the person becomes increasingly depressed.

The primary mechanism that causes the transition from a lapse to a relapse is called the abstinence violation effect (AVE; Marlatt, 1985; Russell, Sturgeon, Miner, & Nelson, 1989). The AVE involves both cognitive and affective responses to the initial lapse. The first response of the AVE is cognitive dissonance (Festinger, 1964), which occurs when an individual's perception about himself (i.e., as an abstainer) is markedly different from his most recent behaviour (i.e., suffering a lapse). Consequently, feelings of guilt associated with this dissonance are dealt with through the re-alignment of the self-image to that of the behaviour (e.g., an individual labelling himself as an alcoholic). The second response involves the attribution to explain the most recent behaviour. If the lapse is attributed to personal weakness and a loss of control, the chance of relapse is higher than if the attribution is made to external factors (e.g., "I was forced to lapse"). The potential for relapse is directly associated with the strength of the AVE, where intense feelings of violation of personal image or self-imposed rules are highly correlated with the probability of relapse (Marlatt, 1978, 1982).

Interventions based on the RP approach utilize primarily behavioural and cognitive restructuring techniques. Specifically, programs that incorporate RP principles employ both specific and global intervention procedures (George & Marlatt, 1989; Marlatt, 1982). Specific intervention techniques provide the client with the ability to recognize and cope with the HRS that was specifically identified for that individual. Furthermore, numerous cognitive-behavioural techniques (e.g., relaxation training, stress management, problem-

solving skills) are often used to cope with HRS and to prevent the recurrence of a lapse and the progression from a lapse to a relapse. Additional techniques (e.g., general problem-solving skills) are used to expand on specific treatment goals and provide a broader scope to the specific interventions provided. The purpose is to add balance to the individual's lifestyle, which will promote effective stress management as well as increased self-efficacy for continued abstinence (Marlatt & Gordon, 1980).

Relapse Prevention and Sexual Offending

The relapse prevention offence process of sexual offending is shown in Figure 1 and is remarkably similar to the one provided for addictive behaviours. However, the RP model with sexual offenders included modified definitions of lapse and relapse. As indicated earlier, a lapse is the initial indulgence in an undesired behaviour, whereas a relapse is the return to problematic or baseline levels of addiction. With sexual aggression, however, any return to sexually deviant behaviour is unacceptable. As such, any deviant precursor to the sexual re-offence (e.g., sexually deviant fantasy, use of pornography) is deemed a lapse, whereas relapse is the commission of a sexual offence (Laws, 2003b; Pithers, 1990).

The AVE contributes to whether or not the lapse will progress to a relapse. This construct is identical to the one described earlier with the RP model for addictive behaviours. Specifically, the AVE surfaces due to the discrepancy between the perceived self, with that of the most recent behaviour (i.e., the lapse). Briefly, a relapse is more likely if the individual attributes the lapse to personal weakness rather than to external events. If the offender implements an adaptive coping response at this stage, the chance of relapse is low. However, if no coping response is utilized, than the possibility that the person will relapse is likely (Pithers, 1990; Pithers et al., 1983).

Although RP with sexual offenders was designed as a maintenance program following treatment, it has been adapted for use as an overall framework for intervention (Laws, 2003b; Yates, 2005; Yates & Kingston, 2005). The application of RP to the treatment of sexual offenders incorporates both an internal self-management component and an external supervisory dimension (Pithers, 1990).

The internal self-management component includes a variety of treatment procedures that are intended to be individualized to the offender and delivered prior to discharge into the community. This internal self-management component initially begins with an orientation for the offender regarding the general principles, including terminology (e.g., AVE) of RP. Following this, an assessment is conducted pertaining to the offender's specific HRS related to past offences and any deficits in coping skills. Interventions are employed that account for these HRS and coping skills are developed in order to prevent lapses and their progression into relapses. In order to minimize the potential of a lapse, offenders are taught to recognize the specific antecedents identified during the assessment portion. Additionally, numerous avoidance strategies and problem-solving skills are practiced in order to deal with potential HRS. Skill-building interventions (e.g., anger management, sexual knowledge) are a critical component and are implemented if an offender displays deficits in these areas. Finally, offenders are taught to restructure their interpretation of the AVE in order to diminish the negative affect, which is directly related to the probability of relapse (Marshall & Anderson, 1996; Pithers, 1990).

Although the internal self-management component is an important element of RP, offenders are, at times, unreliable in their self-report (Pithers et. al., 1983) and, as such, accurate reporting of lapses to the appropriate authorities can be problematic. Consequently,

the external supervisory component was employed to provide treatment and supervision from individuals who are knowledgeable in RP concepts and who are aware of the offender's individualized RP offence cycle (Marshall & Anderson, 1996). The purpose of the external component was to accurately monitor the antecedents to potential lapses and relapses, to create a network of collateral individuals, and to create a collaborative relationship with the individuals involved in the monitoring and supervision of the offender (Laws, 1999; Pithers, 1990).

The RP model described above is the current treatment of choice for sexual offenders in North America, representing nearly 90% of all treatment programs (Laws, 2003b; Pithers, 1991). The widespread application of this model is surprising, given the relative paucity of research attesting to its applicability and validity with this population (Hanson, 1996; Laws, 2003b; Yates & Kingston, 2005).

Criticisms of the Relapse Prevention Model with Sexual Offenders

While RP represented a significant contribution to the treatment of sexual offenders, with the provision of a common language among practitioners and explicit direction for treatment implementation (Polaschek, 2003; Ward, Polaschek, & Beech, 2006), it suffered from a variety of conceptual problems.

The criticisms directed towards RP have focused on either the original RP model (Marlatt & Gordon, 1985), the adapted model applied to sexual offenders (Pithers et al., 1983), or both (Ward & Hudson, 1996; Ward, et al., 2006). Given that the two models are similar, they share many criticisms. Nevertheless, this review will focus on the criticisms directed towards the RP model adapted for sexual offenders.

Ward and colleagues (Ward & Hudson, 1996; Ward, Hudson, & Siegert, 1995) have formulated their critique of RP around problems with the specific mechanisms described in the model, the lack of explanatory ability, and finally, problems with the overall scope of the model. The primary concern with the mechanisms described in the model result from the modification of the offence cycle as well as the lack of applicability of these mechanisms to sexual offending. Given the legal and ethical problems with any reoccurrence of sexually aggressive behaviour, the RP model with sexual offenders required a modification to the way a lapse was defined. That is, lapse was re-defined as an offence antecedent (i.e., fantasy) rather than an engagement in the actual behaviour and, as such, the term was positioned earlier in the offence chain (Ward & Hudson, 1996).

Consequently, the AVE and the problem of immediate gratification were collectively placed between the lapse and the relapse. However, as indicated above, the AVE is a state associated with negative affect, along with attributions of personal failure, whereas the problem of immediate gratification is an anticipatory state that is accompanied by feelings of excitement and positive affect. These are contradictory mechanisms and it is unclear how they operate in concert with one another. This criticism has been further strengthened by empirical evidence suggesting that most offenders experience the AVE post-relapse rather than post-lapse (Ward, Hudson, & Marshall, 1994).

Moreover, RP lacks sufficient explanatory power, which is an important element in theory development (Hudson, Ward, & McCormack, 1999). In other words, RP provides a description of the offence cycle but negates to provide explanations at numerous points during the offence progression. For example, the original model (Marlatt, 1985) suggests that lifestyle imbalance is an event that starts the progression to relapse. However, the RP

adaptation provided no information on how offenders begin the cycle (Ward et al., 2006) nor did it provide a sufficient description regarding the various constructs (e.g., problem of immediate gratification; Laws, Hudson, & Ward, 2000). Finally, it is unclear why some sexual offenders fail to cope, whereas others are able to continuously implement coping strategies in the presence of HRS. In other words, the distinction between skill access and skill development is vague.

Most importantly, RP fails to account for the diversity inherent in sexual offenders. RP identifies skill deficits, poor-problem solving, and a failure to identify situational and other offence precipitants as the sole route to relapse. Therefore, the model emphasizes one covert pathway to sexual offending. However, this is insufficient and negates other motivations for offending and for variations in offence planning (Ward & Hudson, 1996; Yates, 2005; Yates & Kingston, 2005). The model neglects to account for the possibility that some sexual offenders actively seek out sexual offending and that such offending is accompanied by explicit planning and positive emotional states (Ward & Hudson, 1998). This criticism has been strengthened by empirical findings demonstrating that sexual offenders are differentially motivated to achieve various goals and that they implement a range of strategies to achieve such goals (Ward, et al., 1995; Ward et al., 2006). Therefore, the RP model fails to account for many sexual offenders and offence dynamics (Yates & Kingston, 2005).

Empirical evidence for the effectiveness of RP in the treatment of sexual offenders has been minimal and what does exist has been largely disappointing. Moreover, treatment program manuals have not indicated the extent to which the program adheres to RP principles, which has negatively impacted on quality reviews (Marshall & Anderson, 2000).

To address the lack of empirical evidence, Marshall and Anderson (1996, 2000) conducted a review of programs that contained no RP components, programs with the internal self-management component, and programs employing the external component. Results indicated that elaborate internal self-management components (e.g., teaching lexical content) and the external supervisory components were not indicative of positive treatment change in offenders. In fact, the most methodologically sound outcome study of a treatment program based on RP (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005) found negligible treatment effects.

As indicated earlier, many criticisms, both theoretical and empirical, have been directed at RP as applied to sexual offenders. As such, a reformulation was necessary that would be applicable to sexual offenders and that would address the criticisms mentioned above. The most promising replacement for RP currently is the self-regulation model of sexual offending (Laws, 2003b).

The Self-Regulation Model of the Offence Process

The self-regulation model was developed based on evidence challenging the uni-dimensional nature of RP. Specifically, a qualitative analysis of the offence chain (Ward, Louden, Hudson, & Marshall, 1995) indicated that some sexual offenders exhibit positive affect and explicit planning during the offence, which conflicted with the description provided by RP. Similarly, Hudson, et al. (1999) found different pathways representing either positive or negative affect and varying degrees of offence planning. Based on such evidence demonstrating offence-process heterogeneity, Ward and Hudson (1998, 2000) incorporated self-regulation theory into an overall descriptive model of the offence chain.

The self-regulation model (see Figure 2) includes nine phases in the offence progression along with four pathways to sexual offending (Ward & Hudson, 1998, 2000). According to the model, offenders engage in goal-directed action and are guided by various internal and external processes. Specifically, offenders may be influenced by desired states and/or circumstances and, thus, are motivated by acquisitional goals. In contrast, some offenders desire to avoid such situations and/or circumstances and thus, are guided by inhibitory goals. Furthermore, strategies that are either passive (i.e., non-complex) or active (i.e., complex) in design are implemented in order to achieve the predominant goal selected by the individual.

According to self-regulation theory (Carver & Scheier, 1990), inappropriate strategies are defined as either: (1) under-regulated (i.e., a failure to control behaviour); or, (2) mis-regulated (i.e., inappropriate strategies to achieve desired goals). An individual can also exhibit intact self-regulation, where the strategies are effective in achieving desired goals but, with sexual offenders specifically, the goals are problematic. The combination of goals and strategies culminate in a predominant offence pathway to sexual offending. The nine phases are outlined briefly below, followed by the four pathways to sexual offending.

Phase One (life event). According to the model, the initial state of abstinence for an offender is disrupted by a specific event or stressor (e.g., an argument with a partner). Subsequently, the offender evaluates the event in such a way that is consistent with existing implicit theories (see Ward & Keenan, 1999), goals, and the specific context in which the event occurred. The antecedent event and subsequent appraisal is followed by various cognitions and emotions associated with sexually aggressive behaviour and may result in the desire for such behaviour which is accompanied by positive or negative emotional states.

Phase Two (desire for deviant sex or activity). After the initial event and evaluation described in phase one, the offender experiences a desire for sexual or non-sexual aggressive behaviour. This process is relatively covert and is accompanied by either positive or negative emotional states. Again, past memories and existing implicit theories can function to activate the desire.

Phase Three (offence related goals established). Once the desire has been experienced, the offender establishes a goal towards sexually aggressive behaviour. It is in this phase, that the motivation for sexual offending becomes evident. Avoidance goals are reflective of the desire to prevent offending and are most often accompanied by negative emotional states (e.g., fear), whereas approach goals are indicative of a desire to sexually offend and are associated with either positive (e.g., excitement) or negative (e.g., anger) affective states.

Phase Four (strategy selected). Consistent with self-regulation theory, goals are achieved through the utilization of strategies. During this phase, individuals choose a strategy that is likely to result in successfully achieving their established goal. Strategies can be either overt and explicitly implemented and planned, or they can be relatively covert, with little thought placed on utilization.

Phase Five (high risk situation entered). In this phase, individuals come into contact with a potential victim directly resulting from the prior goal followed and strategy implemented. The response to the situation is dependent on the specific pathway followed. That is, individuals with an inhibitory goal are likely to experience negative affect (e.g., anxiety), although some may also experience increasing sexual arousal. Moreover, they are most likely guided by offence scripts and/or automatic responses to situational cues. In

contrast, individuals with an approach goal are likely to experience the need for immediate gratification and will be responding to this need impulsively (i.e., approach-automatic pathway) or through the use of explicit planning (i.e., approach-explicit pathway). The appraisal of the event is positive (e.g., excitement), although some offenders may experience negative emotions, such as anger.

Phase Six (lapse). At this point, individuals are engaging in specific pre-offence behaviour (e.g., massaging the victim). While individuals following the approach pathways continue in attempting to achieve their original goal through the implementation of specific strategies, individuals following the avoidant pathways switch, albeit temporarily, to approach-motivated desires as a result of the strength and immediacy of the potentially gratifying act. Of note, every individual experiences positive emotional states during this phase given the increase in sexual arousal and the potential outlet for their sexual needs, although for some individuals, negative affect may also be present.

Phase Seven (sexual offence). It has been hypothesized that the offenders perception of the victim and the intrusiveness of the sexual assault is dependent on the pathway followed (Ward et al., 1995). Specifically, offenders will either view the offence as: (1) a caring interaction (i.e., a mutual focus); (2) an event that places their own needs before the victims (i.e., a self-focus); or, (3) an act that places the victims experience as paramount (i.e., a victim focus). According to Ward et al. (1995), the mutual-focus stance is evident in offenders demonstrating a long duration of offence behaviour with little intrusiveness. The self-focus perspective is exhibited by those who offended in a shorter period of time but with greater intrusiveness. Finally, the victim-focus is not adequately distinguished with regard to offence characteristics. It is suggested that individuals

following the avoidant pathways would likely be self-focused, thus demonstrating greater intrusiveness and the approach pathways would focus primarily on the victim, thus demonstrating less intrusiveness but longer duration (Ward et al., 2004); however, this has not been examined empirically.

Phase Eight (post-offence evaluation). After the offence, individuals evaluate their behaviour as it relates to their initial goal. Given that offenders with an inhibitory goal failed to achieve their objective, they are likely to experience negative affect and are likely to experience emotions such as shame or guilt, similar to the original conceptualisation of the AVE. In contrast, approach-motivated offenders have achieved their goal to offend and, as such, will experience increased self-esteem and positive affect.

Phase Nine (attitude toward future offending). This phase explains the process by which offenders evaluate their objectives with respect to future offending. It is suggested that offenders with avoidant goals attempt to re-establish control over their offence cycle and resolve to avoid future sexual aggression. In contrast, approach-motivated offenders experience positive reinforcement of their recent behaviour and further improve self-regulatory strategies to offend sexually. Of note, attitudes toward future offending may markedly differ from the original goals established in the beginning of the offence cycle. As such, the model specifically allows for changes in pathways across time.

The process depicted above describes the offence process followed by sexual offenders. The nine-phase model provides the necessary information to establish the predominant offence pathway followed. Each pathway is described below.

The avoidant-passive pathway is characterized by a desire to refrain from offending but the individual lacks the necessary coping strategies to achieve this inhibitory goal.

These offenders utilize passive or covert strategies (e.g., ignoring the deviant thoughts) to abstain from offending and, as such, are representative of an under-regulation self-regulatory style. The strategies employed are insufficient to prevent offending, sometimes resulting in a sexual offence. Following the offence, the offender will experience negative affect (e.g., guilt, shame) given the failure to achieve the desired goal.

The avoidant-active pathway is characterized by a mis-regulated self-regulatory style. Offenders following this pathway desire to avoid the sexual offence, and active strategies are employed, such as alcohol use, to suppress deviant sexual fantasy. This strategy is counterproductive, in that a sexual offence often results from the strategy employed. Following the offence, the offender will experience negative affect (e.g., guilt, shame) due to self-regulatory failure.

The approach-automatic pathway to offending is characterized by an under-regulated self-regulation style and a desire to offend sexually. As such, this pathway to offending is diametrically opposed to the offence progression described in the RP model. Moreover, this pathway is dominated by impulsivity with regards to planning the sexual offence. That is, planning to offend sexually is unsophisticated and rudimentary in manner. Following the offence, the offender likely experiences positive affect (e.g., increased self-esteem), as his goal to sexually offend has been achieved.

Finally, the approach-explicit pathway is characterized by intentional and conscious planning of the sexual offence along with explicit strategies to achieve this goal. As such, this pathway represents an intact self-regulation style. The offence process is well-planned and the offender maintains positive mood states throughout the offence process. The offender likely experiences positive affect (e.g., elation) following the offence, as he has

achieved his original goal to offend sexually (Ward & Hudson, 2000; Yates & Kingston, 2005).

Empirical Support for the Self-Regulation Model of Sexual Offending

The self-regulation model is a theoretically comprehensive model of the offence process and the applicability to the dynamics of sexual offending is promising. However, the model is relatively new and, as such, has not been subject to many independent empirical investigations. The research to date, however, has been supportive and is described below.

Initially, Proulx, Perreault, and Ouimet (1999), examined pre-crime factors (e.g., loneliness), victim characteristics (e.g., gender of victim), and modus operandi characteristics (e.g., type of sexual behaviour) in a sample of 44 untreated extra-familial child molesters. A cluster analysis revealed two distinct groups of offenders, which were defined as non-coercive and coercive, based on the level of sexual intrusion. The non-coercive group exhibited more offence planning, had offences that were longer in duration, and typically offended against unfamiliar male victims when compared to the coercive group. Moreover, the non-coercive group evidenced more instances of deviant sexual fantasy, used more pornography, and were less likely to have used illicit substances than the coercive group. The characteristics evident in these two distinct groups were largely consistent with the theoretical propositions for the approach (non-coercive) and avoidance (coercive) goal dichotomy.

Subsequently, Bickley and Beech (2002) classified 87 child molesters participating in a community-based residential treatment program into one of the four self-regulation pathways. Pathways were determined based on client contact by raters trained in the self-regulation model of sexual offending. Overall, pathway classification was reliable between

raters (kappa = .71), although there was variability across pathways. That is, the avoidant-active, approach-automatic, and approach-explicit pathways were classified reliably, with inter-rater agreement of 80%, 78%, and 88% respectively, whereas the avoidant-passive pathway demonstrated the lowest level of agreement (50%); although, this may have resulted from the limited number of individuals following this pathway. Offenders following different goals and strategies were compared separately on demographic and psychometric data. Results demonstrated that avoidant-goal offenders were more likely to have been married with children, to have offended within the family, most often against female victims, and to have reported fewer cognitive distortions, and lower levels of emotional identification with children compared to approach-goal offenders. With regard to strategy selection, active/explicit planners were more likely to have been married, less likely to have had previous sexual convictions, and less likely to have perceived that events were controlled externally than passive/automatic planners.

Results obtained by Bickley and Beech (2002) supported the self-regulation model by differentiating important concepts identified in the model. Given that such differences may be relevant for treatment, Bickley and Beech (2003) examined the ability of sexual offender treatment to modify distorted thinking in a group of child molesters (n = 59) exhibiting different offense goals. Classification of goals was similar to the procedure described in the earlier study and acceptable levels of inter-rater reliability were demonstrated. Offenders following an approach pathway demonstrated significant differences following treatment on measures regarding cognitive distortions and distortions in victim empathy. No pre-post treatment change was evident for offenders following the

avoidant pathway, as these individuals were not exhibiting problematic levels of distortions prior to treatment.

Webster (2005) interviewed 25 treated sexual recidivists who had offended against either a child or adult and used grounded theory analysis to evaluate the content validity of the self-regulation model. The responses were reliably allocated to the individual phases and the overall pathways identified in the model. Moreover, the predominant pathway demonstrated pre- and post-treatment was approach-explicit and the particular pathway followed was stable; that is, did not change when evaluated pre-treatment and post-treatment. The over-representation of the approach-explicit pathway may have resulted from the focus on sexual recidivists and the results may not be generalizable to samples comprised of non-recidivists.

More recently, Yates and Kingston (2006) evaluated the relationship between offense pathways and risk to re-offend sexually. Specifically, 80 treated sexual offenders (both rapists and child molesters) were classified to one of the four pathways based on detailed file review. Results indicated that significant differences were evident among the various types of sexual offenders (e.g., rapists versus intra-familial offenders) and specific pathway followed. That is, the avoidant-passive pathway was comprised predominately of intra-familial offenders (81.8%), whereas the approach-automatic pathway consisted primarily of rapists (82.6%). The approach-explicit pathway was comprised almost equally of child molesters with male victims (24.4%), intra-familial offenders (29.3%), and rapists (29.3%). Overall, the rapists and child molesters with male victims tended to follow the approach pathways, whereas the intra-familial offenders were distributed across both approach and avoidant pathways. With regard to risk to re-offend, offenders following the

avoidant-passive pathway scored lower on the Static 99 (Hanson & Thornton, 1999) and a dynamic measure of criminality (Wong, Olver, Nicholaichuk, & Gordon, 2000) than the approach-automatic and approach-explicit pathways. Moreover, individuals exhibiting an approach-automatic pathway scored higher on the measure of criminality when compared to the approach-explicit group. While the reliability of the coding methodology was marginal (kappa = .61), the method used was relatively unstructured, in that there was no set criteria for pathway classification. Therefore, it was hypothesized that structured guidelines for pathway assessment would improve on the reliability of coding.

Finally, and most recently, the self-regulation model has been examined among offenders with intellectual disabilities. Keeling & Rose (2005) first hypothesized that offenders with intellectual disabilities would follow either an avoidant-passive or approach-automatic offence pathway, given the emphasis of poor coping and impulsivity evident within these pathways. Empirical investigations have demonstrated that the self-regulation model in general, and the four pathways in particular, can be reliably coded using file review among offenders with intellectual disabilities (Keeling, Rose, & Beech, 2006; Lindsay, Steptoe, & Beech, 2008). Interestingly, both the Keeling et al. and Lindsay et al. studies indicated that special needs offenders were most likely to follow an approach-automatic and approach-explicit offence pathway.

Despite the fact that the self-regulation model represents an improved theoretical construct when compared to the earlier RP model and that some preliminary empirical support has now been ascertained, as described above, there are some potential limitations. Specifically, some investigators have questioned the extent to which possible alternative offence processes and/or pathways (e.g., individuals who display multiple pathways) are

evident, beyond those described in the model (e.g., Ward et al., 2006). Moreover, Marshall and colleagues (Marshall, et al., 1999; Marshall, Marshall, Serran, & Fernandez, 2006) have questioned the extent to which the development sample, which was comprised of untreated sexual offenders, may have compromised the formation of the nine phases. In other words, given that untreated sexual offenders may be less aware of important distal factors implicated in their offence process, the identification of important factors based on the report of untreated individuals may not be entirely accurate.

Most importantly, while not necessarily a criticism of the model, it is important to note that the self-regulation model has been developed and implemented relatively recently (Ward & Hudson, 1998; 2000) with limited opportunity to evaluate the practical utility of the model. As such, further research is necessary prior to widespread acceptance and implementation within sexual offending treatment programs.

Correctional Service of Canada's Program Description

Sexual offender treatment programs operated by the Correctional Service of Canada (CSC) utilize a cognitive-behavioural approach to increase awareness of the attitudes, beliefs, and behaviours that influence sexually aggressive behaviour and to develop skills to manage risk and replace deviant or problematic processes with appropriate responses. Consistent with the risk/need/responsivity model (Andrews & Bonta, 1998), offenders are triaged to high, moderate, or low intensity treatment, based on their risk to re-offend and presenting criminogenic needs. That is, the intensity of treatment is matched to an offender's level of risk, as determined during a comprehensive intake assessment.

High, moderate, and low intensity sexual offender programs operated by CSC are structured to include the delivery of components empirically linked to sexual offending.

Specifically, these programs include: identifying high risk situations, identifying coping and other skills deficits, challenging cognitive distortions exhibited by offenders, developing victim empathy, managing negative emotional states, enhancing social and intimate relationships, reconditioning deviant sexual arousal, and developing effective problem-solving strategies (Yates et al., 2000).

Consistent with the risk principle, as described by Andrews and Bonta (1998), higher intensity treatment programs are provided for longer periods than lower intensity treatments and consequently, greater attention is devoted to relevant criminogenic needs. Within the CSC, high intensity sexual offender programs typically run for 8-9 months, with a range of 420 to 480 contact hours per program. The moderate intensity sexual offender program typically runs for 4 to 5 months with 200 to 224 direct contact hours per program. Finally, the low intensity sexual offender program operates between 2 and 3 months with 40 to 48 contact hours per program. After completing the core treatment program, individuals are typically encouraged to participate in maintenance programming, in order to further entrench previous treatment gains.

The Present Study

The self-regulation model of sexual offending has been adopted by the CSC's National Sex Offender Programs (NaSOP) as the overarching offence process model to guide treatment and has replaced the RP approach, described earlier. This model has been examined to a limited extent (e.g., Bickley & Beech, 2002; Webster, 2005; Yates & Kingston, 2006) but needs further examination. Specifically, the self-regulation model has not been investigated with respect to change on a variety of dynamic risk factors and its utility with various types of sexual offenders has not been examined extensively. As such, a

comprehensive evaluation of this model is necessary to determine its application and value with this population. To address these areas, several hypotheses were examined, which were predominantly based on the literature described previously, and on the several theoretical descriptions reviewed above (e.g., Ward & Hudson, 1998, 2000).

General Hypotheses

Prior to evaluating the primary hypotheses involving self-regulation pathways, the present study examined the associations among the study variables in order to evaluate the validity (e.g., concurrent validity) of the items included in the assessment battery. It was first hypothesized that none of the measures would correlate with socially desirable responding, as has been demonstrated in previous investigations examining each of these measures (see below for further details).

With regard to the study variables, it was hypothesized that there would be significant and positive associations among the risk assessment instruments, as they measure related constructs. Additionally, the self-report measures will be significantly associated with the risk assessment instruments, in line with the presumed relationship between NaSOP treatment targets and criminogenic needs (Yates et al., 2000). Finally, the relationships among treatment needs will be consistent with theoretically informed directions. That is, denial and minimization will be negatively correlated with empathy, and social functioning/intimacy. Denial will also be positively correlated with antisocial attitudes and emotion regulation deficits. Distorted cognitions will be negatively correlated with social functioning/intimacy and empathy and positively correlated with emotion regulation deficits. Finally, deficits in emotion regulation will be negatively associated with social

functioning and intimacy and empathy, whereas these latter domains will be positively related to one another.

Primary Hypothesis One: Group Differences

Offenders following different offence pathways will show variation with respect to offence-related variables (e.g., degree of sexual and violent intrusiveness), type of sexual offender (e.g., rapists, child molesters), actuarial risk (i.e., static and dynamic risk), and self-reported treatment targets (e.g., empathy, cognitive distortions).

Sub-hypothesis 1.1. It is expected that offenders following approach-oriented pathways will demonstrate a greater number of victims, less offence intrusiveness during the offence, as well as more previous sexual, violent, and criminal offences when compared to avoidant-oriented pathways. In terms of self-regulation strategies, individuals employing either under-regulated or mis-regulated offence strategies will demonstrate a greater number of victims, more prior criminal offences and will also demonstrate more sexual and general violence during the index offence than individuals with intact self-regulation, in line with theoretical descriptions associating victim perception and intrusiveness of the sexual offence.

Sub-hypothesis 1.2. Rapists will predominantly fall into the approach-oriented pathways and will be dispersed equally among the two strategies. Extra-familial child molesters will predominantly follow an approach-explicit pathway. Intra-familial child molesters will predominantly follow an avoidant-oriented pathway and will be dispersed equally among the two self-regulatory strategies. Offenders exhibiting heterogeneous victim types will be allocated predominantly to the approach-explicit offence pathway.

Sub-hypothesis 1.3. Offenders who follow either approach pathway will demonstrate higher assessed risk to re-offend sexually when compared to the avoidant pathways. Some differences within offence-related goals are expected, such that offenders following an approach-explicit offence pathway are likely to obtain higher scores on features of sexual deviance, whereas offenders following an approach-automatic pathway are likely to score higher on risk for general criminality. Finally, individuals following an avoidant-active pathway will be assessed as higher risk when compared to the avoidant-passive offence pathway.

Sub-hypothesis 1.4. Offenders following different pathways will show considerable variability among the self-reported treatment targets. Specifically, offenders following approach pathways will show greater levels of distorted cognitions, less acceptance of responsibility of the sexual offence, greater anger/hostility, less empathy, less intimacy, and more loneliness than individuals following avoidant-oriented pathways. Moreover, individuals employing intact self-regulation strategies will demonstrate greater levels of cognitive distortions, less acceptance of the sexual offence, more empathy, more intimacy, less loneliness, and less anger/hostility than the passive/automatic strategies.

Primary Hypothesis Two: Pre-Post Change

It is expected that CSC's NaSOP will result in successful pre-post change on all self-reported treatment targets; that is, individuals will evidence improvement on measures examining the variety of self-reported treatment targets as a result of participation in treatment. However, it is expected that offence pathway will serve as a moderator variable and that the observed pre-post change will not be uniform across groups. Specifically, offenders who follow the approach pathways will show greater change on treatment needs

(e.g., empathy, hostility, intimacy) compared to individuals following the avoidant pathways. More specifically, individuals employing passive/automatic self-regulatory strategies will evidence greater improvement than individuals with intact self-regulation.

Method

Participants

Participants included 275 adult males who were convicted of a contact sexual offence and were incarcerated in a Canadian federal institution (average sentence length was 4.4 years; *SD* = 3.1 years; range = 2 years to 21 years). The majority of the sample was Caucasian (76.4%), Aboriginal (14.5%) and African-Canadian (4%). The average age of the sample was 40.4 years (*SD* = 13.0 years; range: 18 years – 80 years) and the average years of education obtained was 10.4 years (*SD* = 2.0 years). The majority of the participants had been married or lived common-law with a partner (75.5 %). Of the 275 offenders, 60 (21.8 %) offended against an unrelated victim under the age of 16 at the time of offence and 101 (36.7 %) offended against a related child victim (i.e., biological child, step-child, niece, grandchild, or sibling). Among these individuals, 18 (11.2 %) had exclusively victimized boys, 127 (78.9 %) had exclusively victimized girls, and 16 (9.9 %) had victimized both girls and boys. Additionally, 85 (30.9 %) had offended against an unrelated adult female victim, whereas 29 (10.5 %) had offended against heterogeneous victim types (i.e., adult and child victims or related and unrelated child victims). In terms of offence history, 89 (32.2 %) had previous charges or convictions for sexual offences, 134 (48.7 %) had previous charges or convictions for violent (including sexual) offences, and 183 (66.5 %) had previous charges or convictions for criminal offences.

In terms of NaSOP allocation, 35 (12.7 %) participated in a high intensity program, 148 (53.8 %) participated in a moderate intensity program, and, 92 (33.5 %) were enrolled in a low intensity program. Among these individuals, a majority of the participants

successfully completed the program to which they were assigned (86.2 %). A small proportion of offenders (2.9 %) were suspended or dropped out of the program. Twenty-one participants (7.6 %) completed the program but were described in the database as "attended all sessions", which denotes individuals for whom no evidence of treatment gain was evident. The remaining 9 participants (3.3 %) were released or transferred prior to the completion of the program. Of note, the majority of offenders who were suspended or were described as "attended all sessions" were classified as following an approach-explicit offence pathway (44.8 %).

Participation was voluntary and informed consent was given (Appendices A and B). Certification of ethical approval from the Social Sciences and Humanities Research Ethics Board of the University of Ottawa (Appendix C) and permission from the research branch of the CSC (Appendix D) to conduct the present investigation were granted.

Measures and Materials

Assessment of offence pathway

Pathway Classification (PC; Kingston, 2006, *Appendix E*). During data collection, there were no empirically validated assessment measures for identifying offence pathway. Studies have used either structured/qualitative interviews (Bickely & Beech, 2002; Ward et al., 1995; Webster, 2005), or relatively unstructured file review methodology (Yates & Kingston, 2006). Although Yates and Kingston's (2006) methodology adequately identified offence pathway using archival files, the unstructured methodology was a significant limitation in that study. As such, the PC was developed to provide structure to the way in which offence pathway was coded. Specifically, the variables that were used in the Yates and Kingston (2006) study and the variables that have been either theoretically (Ward &

Hudson, 1998) or empirically related to offence pathway (Bickley & Beech, 2002; e.g., cognitive distortions, offence planning) were included in the measure. The PC includes items pertaining to the desire to prevent offending, cognitive distortions, attitude toward offending, post offence evaluation, offence planning, type of coping skills, and perceived control over offending behaviour. Each variable was coded on scale from zero to two, where higher scores were indicative of approach goals and active/explicit strategies and scores are tabulated to indicate offence pathway. The present study represents the first investigation using a structured assessment scheme for determining offence pathway.

Risk assessment instruments

Static-99 (Hanson & Thornton, 1999, *Appendix F*) is an actuarial risk assessment measure for sexual and violent recidivism and consists of ten items, including: prior sexual offences, prior sentencing dates, current age, non-contact offences, index non-sexual violence, prior non-sexual violence, unrelated victim, stranger victim, male victim, and whether the offender has ever attained a long-term intimate relationship. Total scores can range from zero to twelve, with the accompanying risk categories: 0-1 (low); 2-3 (medium-low); 4-5 (medium-high); and, 6-12 (high). The Static-99 has demonstrated excellent inter-rater reliability in a variety of studies (see Doren, 2002, for a review), as well as good concurrent validity (Roberts, Doren, & Thornton, 2002). Research attesting to the predictive accuracy of the instrument has been encouraging and consistent. Most studies have reported ROC statistics in the .7's for sexual recidivism (Barbaree, Seto, Langton, & Peacock, 2001; Kingston, Yates, Firestone, Babchishin, & Bradford, 2008; Sjostedt & Langstrom, 2001).

The Violence Risk Scale: Sex Offender Version (VRS: SO; Wong, Olver, Nicholaichuk, & Gordon, 2000, *Appendix G*). The VRS: SO was developed to assess risk

for sexual recidivism and change in dynamic risk factors following treatment. This scale assesses both static and dynamic risk factors. The static items are taken directly from the Static-99, while the dynamic section consists of sixteen risk factors, combined into three domains, including sexual deviancy (VRS: F1), criminality (VRS: F2), and treatment responsivity (VRS: F3). The measure also yields total risk ratings of low (a score below 20), medium-low (20 to 29), medium-high (30 to 39), and high (40 to 50). The measure has demonstrated good inter-rater reliability (r = .84) and the dynamic items yielded adequate predictive accuracy for sexual recidivism at both pre-treatment (r = .20) and post-treatment (r = .25; Wong et al., 2000). More recently, Olver, Wong, Nicholaichuk, and Gordon (2007) examined the validity and reliability of the VRS: SO among a sample of incarcerated male sexual offenders. Results supported the overall factor structure and revealed adequate inter-rater reliability and internal consistency. Finally, the pre-treatment total score was significantly associated with sexual recidivism (receiver operator characteristic [ROC] = .71) but was not associated with non-sexual, violent recidivism (ROC = .56). The post-treatment total score was significantly associated with sexual and non-sexual recidivism (ROCs = .72 and .57, respectively).

Stable 2000 (STABLE; Hanson & Harris, 2001, *Appendix H*). The Stable 2000 is comprised exclusively of dynamic risk factors and was specifically developed to assist community supervision officers to monitor changes in risk over time. The tool consists of six stable dynamic risk domains, which were extrapolated from the stable section of the Sex Offender Needs Assessment Rating (SONAR; Hanson & Harris, 2001). Each dynamic risk domain is scored from zero to two. The evaluator then uses the highest score to determine that domain's total score. Scores can range from zero to twelve, with the accompanying risk

categories: 0-4 (low risk), 5-8 (moderate risk), and 9-12 (high risk). The measure has shown excellent inter-rater reliability (ICC = .90) and predictive accuracy for sexual (ROC = .76), violent (ROC = .77) and any (ROC = .70) type of recidivism (Hanson, 2005).

Social desirability assessment

Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984, *Appendix I*). The BIDR is a measure of an individual's propensity to provide socially desirable responses on self-report questionnaires. Individuals respond to forty statements on a scale from zero to seven, which represent if the statements are not true, somewhat true, or very true. The BIDR examines two constructs: (1) self-deception; and, (2) impression management. The former construct is similar to overconfidence or narcissism and examines the tendency to give honest but inflated self-descriptions. The latter, on the other hand, is akin to a deceptive presentation by the individual. The two constructs are combined to provide an overall account of socially desirable responding. Higher scores on this measure are indicative of greater deception. The scale has demonstrated good reliability and validity in psychometric evaluations. For example, Paulhus (1988) reported that the scale had good internal consistency, with coefficient alphas ranging from .68 to .80 for the self-deception scale, and alphas ranging from .75 to .86 for the impression management scale. Similarly, the overall scale had good internal consistency (alpha = .83). Moreover, the scale has shown adequate test-retest reliability for the self-deception scale, and the impression management scale with correlations of .69 and .65, respectively. Finally, the scale has shown good concurrent validity with other measures of response bias (e.g., Marlow-Crowne Social Desirability Scale; r = .84) as well as good convergent validity (Paulhus, 1988, 1991).

Assessment of denial and minimization

Sex Offender Acceptance and Responsibility Scales (SOARS; Peacock, 2000, *Appendix J*). The SOARS is a self-report questionnaire that evaluates the degree to which sexual offenders accept responsibility for their offences. The individual responds to fifty-three items on a five-point scale (0 = not agree to 4 = agree strongly) which are transformed into six subscales related to the acceptance of the sexual offence. These include: (1) acceptance of the sexual offence (ASO); (2) acceptance of offence planning (AOP); (3) acceptance of victim harm (AVH); (4) motivation to change (MC); (5) justifications for sexual offending (JSO); and, (6) acceptance of deviant sexual interests (ASI). Higher scores on each subscale represent greater acceptance of that specific criterion. In the validation study, Peacock (2000), reported moderate to good internal consistency with alphas ranging from .69 to .92 for the various subscales. Additionally, the scale demonstrated good convergent validity and test-retest reliability. Overall, the scale was not related to socially desirable responding (Peacock, 2000).

Assessment of cognitive distortions

Bumby Rape and Molest Scales (Bumby, 1996, *Appendix K*). The Bumby Rape (Bumby-R) and Molest (Bumby-M) scales were designed to assess cognitive distortions in rapists and child molesters, respectively. The Rape scale is a thirty-six item self-report questionnaire measured on a four-point likert-type scale. The Molest scale is a thirty-eight item self-report questionnaire measured on a four-point likert-type scale. Higher scores represent greater endorsement of cognitive distortions. In the initial validation study, both the Molest and Rape scales were found to have excellent test-retest reliability (*r's* = .84 and .86 respectively) and excellent internal consistency (alpha = .96 for both measures) (Bumby, 1996). Furthermore, both scales demonstrated excellent convergent and discriminant

validity. Despite the suggestion that self-report measures are transparent and subject to response bias, both measures were unrelated to socially desirable responding (Bumby, 1996). A more recent study demonstrated excellent internal consistency (alpha = .97 for both scales) and convergent validity (Arkowitz & Vess, 2003).

Social functioning/intimacy assessment

Miller Social Intimacy Scale (MSIS; Miller, & Lefcourt, 1982, *Appendix L*). The MSIS is a seventeen-item self-report questionnaire that assesses the level of intimacy currently experienced in interpersonal relationships. Individuals respond to a variety of statements (on a one to ten scale) pertaining to the degree of intimacy experienced in current relationships. Higher scores on the measure are indicative of higher levels of intimacy. In the validation study, Miller and Lefcourt (1982) found that the measure assessed a single construct, suggesting high internal consistency (alpha = .91), demonstrated excellent test-retest reliability (r = .96), and had good discriminant and construct validity.

UCLA Loneliness Scale-Revised (UCLA; Russell, Peplau, & Cutrona, 1980, *Appendix M*). The UCLA Loneliness Scale - Revised is a twenty-item self-report questionnaire of loneliness. Individuals respond to each statement, on a scale from one to four, indicating the frequency with which the specific affect indicated by the item is experienced. Higher scores represent greater levels of perceived loneliness in their relationships. Russell et al. (1980) reported that the scale has excellent internal consistency (alpha = .94) and good concurrent validity, given its association with constructs conceptually related to loneliness (e.g., depression) but not with unrelated constructs (e.g., creativity). This measure has been correlated more highly with other measures of loneliness

than with measures assessing mood and personality. The measure was unrelated to socially desirable responding (Russell et al., 1980).

Empathy

Child Molester Empathy Measure (CMEM; Fernandez, Marshall, Lightbody, & O'Sullivan, 1999, *Appendix N*). The CMEM is a self-report measure of victim empathy designed specifically for child molesters. The questionnaire is comprised of three vignettes, including: (1) a description of a non-gendered child who was disfigured in a car accident; (2) a non-gendered child who was sexually assaulted by an unknown offender, and; (3) a description of the offender's own victim. The offender responds to each item (on a zero to ten scale) with regard to: (1) his recognition of the child's distress and (2) his own feelings about the victim. Three subscales are produced regarding empathy toward children in general (CMEM: 1), children who were sexually assaulted (CMEM: 2), and the offender's own victim (CMEM: 3). Higher scores on these measures are indicative of higher levels of empathy. The development sample indicated good internal consistency across the various scales, with alphas of .82 for the general victim of sexual assault, .87 for the car accident victim, and .88 for the offender's own victim. Child molesters demonstrated less empathy towards victims of child molestation in general and toward their own victims than the non-offender control group, indicating good discriminant validity (Fernandez et al., 1999).

Rapist Empathy Measure (REM; Fernandez & Marshall, 2003, *Appendix O*). The REM is a self-report measure of victim empathy designed specifically for rapists. The questionnaire is comprised of three vignettes, including: (1) a description of an adult female who was disfigured in a car accident; (2) an adult female who was sexually assaulted by an unknown offender, and; (3) a description of the offender's own victim. The offender

responds to each item (on a zero to ten scale) with regard to: (1) his recognition of the women's distress and; (2) his own feelings about the victim. Three subscales are produced regarding empathy toward adult victims in general (REM: 1), adult victims who were sexually assaulted (REM: 2), and the offender's own victim (REM: 3). Higher scores on these measures are indicative of higher levels of empathy. Fernandez and Marshall (2003) indicated that rapists had less empathy towards their own victims than a non-offender control sample, supporting the instruments' discriminant validity. Moreover, results indicated good internal consistency across the scales (alpha = .85 to .91) and good test-retest reliability (r = .81 to r = .84). These findings were replicated in another study (see Marshall & Moulden, 2001), where the REM had high internal consistency with alphas of .92, .96, and .98 for the three scenarios, respectively.

Emotion management assessment

Aggression Inventory (AI; Buss & Perry, 1992, *Appendix P*). The Aggression Inventory was developed to measure various forms of aggression and is composed of twenty-nine statements. The individual indicates the degree to which each statement is characteristic of their behaviour (on a scale from one to five). The measure has four subscales: (1) physical aggression (AI: Physical); (2) verbal aggression (AI: Verbal); (3) anger (AI: Anger); and, (4) hostility (AI: Hostility). Higher scores on each subscale are indicative of greater levels of anger/hostility.

The measure has been shown to have adequate test-retest reliability for physical aggression (r = .80), verbal aggression (r = .76), anger (r = .72), and hostility (r = .72) and good internal consistency with respect to all subscales (physical aggression [alpha = .85];

verbal aggression [alpha = .72], anger [alpha = .83], and hostility [.77]). Data showing good discriminant validity and convergent validity have also been provided (Buss & Perry, 1992).

Offence characteristics and previous criminal history

Offence Characteristics. Offence characteristics are represented by the violence of the sexual offence and the intrusiveness of the sexual act, both of which were coded via objective indicators evident during the sexual offence. The violence of the sexual offence was measured using a ten-point scale indicative of increasing levels of force and violence. The specific descriptors along with their corresponding scores are as follows: nil (0), threat of assault with no weapon (1), threat of assault with weapon (2), minor injury with no weapon (3), minor injury with weapon (4), severe beating with no weapon (5), severe beating with weapon (6), potential homicide (7), homicide (8), and homicide with post-death mutilation (9). The intrusiveness of the sexual act is based on a six-point scale where higher scores represent increasing levels of sexual intrusion. The specific descriptors along with their corresponding scores were as follows: nil (0), verbal threat (1), attempt (2), touching (3), penetration (4), and sexual assault with excessive violence (5). These measures are included to provide objective descriptions of the level of violence (both sexual and violent) in the current offence.

The present study assessed the inter-rater reliability for the violence of the sexual offence and the intrusiveness of the sexual act using Cohen's kappa (1960) for approximately 30 % of the sample population (N = 85). The violence of the sexual offence produced a kappa coefficient of .52, suggesting moderate inter-rater agreement and the intrusiveness of the sexual act yielded a kappa coefficient of .75, suggesting substantial inter-rater reliability (Landis & Koch, 1977).

Criminal History. Offence history data were collected from the Canadian Police Information Center (CPIC) records. CPIC is a national record of criminal arrests and convictions. Information such as type of offence, date of offence, disposition of the incident, and sentence length is included. Criminal history consisted of charges and/or convictions that occurred prior to the index offence. Both charges and/or convictions were used as this more accurately reflects offence history as it is common for some offences to be dropped or pled down to lesser charges.

Procedures

In order to participate in the program, participants signed an informed consent form (Appendix A or B, depending on the year of admission), indicating their consent to participate in the program and their willingness to complete the assessment battery, which could be used for research purposes. The assessment battery was administered at both pre-treatment and post-treatment (with the exception of the Static 99) and was intended for the assessment of risk and for the identification of treatment targets (i.e., criminogenic needs) and change as a result of treatment. Assessment information was sent from various program sites to CSC national headquarters over a secure network drive at the conclusion of each program. Although participants were treated across Canada, the assessment and treatment provided to each individual was consistent and uniform. That is, each treatment provider and/or evaluator was trained and certified under the National Sex Offender Program's training protocol. Moreover, each program operates according to a standardized program manual, which encourages flexibility in treatment delivery, but also ensures consistency across treatment targets and interventions designed to promote behavioural change.

Data Screening and Treatment

All data analyses were performed using version 16 of the Statistical Package for the Social Sciences (SPSS) for windows. Procedures for handling missing items on self-report scales were originally addressed in the assessment database sent to individual program sites (see procedure section above). Specifically, an algorithm was constructed in which variables with more than 5% of missing items were omitted, whereas variables with less than 5% were imputed with mean substitution (see Tabachnick & Fidell, 2001). Given that some data were sent with individual items scores, whereas other data sets contained score totals only, an analysis using SPSS MVA (Missing Value Analysis; SPSS Inc., 2003) was not warranted.

Data were screened to ensure that assumptions of parametric data were met (e.g., normality, linearity, multicollinearity, singularity and homogeneity of variance) for both grouped and ungrouped data. Additional assumptions relevant to particular analyses (e.g., the assumption of a linear relationship between the predictor variables and the logits of the dependent variable for the polytomous logistic regression) were evaluated and satisfied.

Standardized scores were computed and outliers were identified using a criterion of z = 3.29 and extreme values were modified by adjusting the score according to the direction of the problem (i.e., one-unit smaller or larger than the next most extreme score; Tabachnick & Fidell, 2001). Normality was examined using quantitative procedures (i.e., the calculation of central moments; skewness and kurtosis) and Number of Victims of the Index Offence, Degree of Violence, Previous Sexual Charges and/or Convictions, Bumby-M-post, Bumby-R-post, and AI-Physical-post were significantly and positively skewed. Reciprocal transformations were applied to the positively skewed data [except both Bumby scales

where a log (10) transformation was most appropriate] resulting in deviations that were within acceptable limits. With regard to negatively skewed data (i.e., CMEM: 2), a log (10) transformation was applied resulting in an acceptable distribution. Analyses were performed using both modified and unmodified data. The results were comparable with respect to significance and effect size and, as such, only the results using the unmodified data were reported.

Finally, the present study contained numerous coefficients and between-group comparisons. In some cases, it is desirable to reduce the number of variables in order to avoid multicollinearity and have a more powerful set of analyses. However, each variable that is included in the CSCs assessment battery reflects an empirically or theoretically important criminogenic need. Moreover, multicollinearity was not a problem in the present study, as no correlation exceeded .90 (see Tabachnick & Fidell, 2001). As such, all coefficients were retained for subsequent analyses. A Bonferroni correction was used to correct for spurious findings and a conservative criterion for determining statistical significance was set at $p < .0004$. For comparisons using nominal data (i.e., adjusted standardized residuals), this criterion corresponds to values greater than 3.29. However, the sole reliance on statistical significance for hypothesis testing has been criticized as neglecting the potential role of effect size and some have suggested that the Bonferroni correction may be too conservative (Hochberg & Benjamini, 1990). As such, the results described below will also highlight the magnitude of the effect.

Effect Size Indicators

An effect size is a standardized value that estimates the magnitude of the difference between groups, which facilitates comparisons across studies and allows for the

determination of practical or clinical significance of associated results (Cohen, 1988, 1992). Accurate reporting of effect size indicators has become increasingly recognized as an essential component of empirical research (Wilkinson & APA Task Force, 1999).

Several effect size indicators were reported in the present investigation that were chosen based on the underlying properties of the statistic and the utility over other commonly used indicators when used with a particular statistical test (e.g., Howell, 2002; Kotrlik & Williams, 2003; Rice & Harris, 2005). The simplest indicator representing the magnitude of effect in the present study was the correlation coefficient (Pearson's *r*) and it is generally considered that values of .1, .3, and .5, represent small, medium, and large effects, respectively.

For the between-subjects analyses, the strength of the omnibus *F* tests were evaluated using omega squared (ω^2)[1] with associated descriptors of .01 for small, .06 for medium, and .14 for large effects. Also Cramér's *V* was used for categorical variables with the following interpretive descriptors (Rea & Parker, 1992): < .01 (negligible association), < .20 (weak association), < .40 (moderate association), < .60 (relatively strong association), < .80 (strong association), < 1.00 (very strong association). Post-hoc comparisons on the continuous variables utilized Cohen's *d* and corresponding values for small, medium and large effects are 0.2, 0.5, and 0.8. For grouped means with a repeated measures factor, the effect size used was partial eta squared (η_p^2) and values of .01 are small, .06 are medium, and .14 are large.

Finally, for the polytomous logistic regression analyses, the magnitude of the effect is reported as odds ratios, defined as the ratio of the odds of an event in an exposed group to

[1] Although ω^2 is not as commonly reported as eta squared (η^2) or partial eta squared (η_p^2) when comparing grouped means in ANOVA, its value is a more accurate representation of the effect size in the population (see Howell, 2002 for a more detailed description)

the odds of the same event in a group that is not exposed. Stated differently, the odds ratio corresponds to the increase or decrease in the predicted odds of an outcome that is related to a one-unit increase of the predictor variable (an odds ratio of 1.00 reflects no relationship between a predictor and outcome variable). Interpretation of the odds ratios will be further described in the text where applicable.

Results

Classification of Offence Pathway and Reliability of Coding

Self-regulation pathway was determined through a detailed examination of the offence progression, including both motivation and behaviour prior to the offence, and post-offence evaluation. Offence pathway was determined without knowledge of scores on the risk or needs based measures. The PC was initially utilized with 280 sexual offenders who had participated in one of CSC's National Sexual Offender Programs. Among these individuals, five offenders were not classified to a primary offence pathway, due to insufficient file information and/or contradictory coding results. These individuals were removed from further analyses. Among the remaining 275 participants, 54 (19.6%) followed an avoidant-passive offence pathway; 45 (16.4%) followed an avoidant-active offence pathway; 75 (27.3%) followed an approach-automatic offence pathway; and, finally, 101 (36.7%) followed an approach-explicit offence pathway.

Given the relatively subjective nature of the above coding scheme, inter-rater reliability was examined on approximately 30 % of the sample population ($N = 85$). A second rater was trained in the self-regulation model through reading essential papers outlining the theoretical components of the model (e.g., Ward & Hudson, 1998) and working through practice case examples (Yates, Kingston, & Ward, 2009). Inter-rater agreement was assessed using Cohen's Kappa (1960). This index was chosen over other commonly used statistics for several reasons. First, the kappa coefficient, which corrects for agreement by chance, has been used in previous investigations examining self-regulation pathway (Bickley & Beech, 2002; Lindsey et al., 2008; Yates & Kingston, 2006) and therefore, the use of kappa facilitates comparisons with these previous studies. More importantly, the

kappa coefficient is a better index of rater agreement than other methods because of the nature of the assessment scheme. That is, the correlation coefficient measures the correlation between evaluators' ratings but not necessarily the degree of agreement and the intraclass correlation coefficient, although typically a superior index is generally more suited to analyses in which the seriousness of the disagreement should be taken into account. The present study used the interpretive guidelines proposed by Landis and Koch (1977), which stated that kappa coefficients from .00 to .20 are slight; .21 to .40 are fair; .41 to .60 are moderate; .61 to .80 are substantial, and .81 to 1.00 are almost perfect.

Table 1 presents the classification of offenders for which two raters assigned an offence pathway. The overall classification rate was 77.6 %, producing a kappa coefficient of .70, suggesting substantial reliability. The classification with the highest agreement between the two raters was the approach-automatic group (82.6 %), followed by the approach-explicit group (80 %), with the avoidant-active group (77.7 %) and the avoidant-passive group showing lower levels of agreement (70.8 %).

General Hypotheses

Relationship among study variables

Socially desirable responding

To examine the relationship between socially desirable responding using the BIDR and other self-report questionnaires (i.e., self-reported treatment targets), Pearson product-moment correlation coefficients were calculated and are graphically illustrated in Figure 3. These analyses were evaluated at the $p < .05$ level because it is desirable, in this case, to be more liberal in detecting relationships which would otherwise distort these data.

In addition to the total score, the BIDR examines two constructs: self-deception and impression management, the latter of which is particularly relevant to a deceptive presentation. Zero-order correlations between the impression management subscale and the self-reported treatment targets were similar in terms of effect size and statistical significance to the results obtained using the overall BIDR scale and, as such, only the total score is presented.

The first aspect of the present study's general hypothesis, indicating that the self-report measures would be unrelated to socially desirable responding, was not supported. Among the significant zero-order correlations, the amount of variability accounted for ranged from 4% (BIDR with SOARS [AVH]; $r^2 = .04$) to 15% (BIDR with AI-Anger; $r^2 = .15$). More specifically, higher scores on the BIDR were significantly associated with lower scores on the ASO, AOP, AVH, MC, and ASI subscales of the SOARS, as well as lower scores on the UCLA, AI-Physical, AI-Verbal, AI-Anger, AI-Hostility, and REM: 3. In contrast, higher scores on the BIDR were significantly associated with higher scores on the MSIS.

A number of methods have been proposed to cope with response bias, one of which involves utilizing social desirability as a control variable. However, recent meta-analyses have indicated that social desirability may be an important aspect of personality (Li & Bagger, 2006). These findings, in confluence with other investigations (Hanson & Wallace-Capretta, 2004) have led some (see Mills & Kroner, 2006) to suggest that partialling out social desirable responding may distort the true relationship between the independent variable and the outcome measure. As such, all subsequent analyses in the present investigation pertaining to the relevant self-reported treatment targets were conducted on

both controlled (using BIDR total score) and uncontrolled variables and differences between these analyses will be described when relevant.

Inter-correlations among study variables

The next set of analyses pertaining to the general hypotheses examined the inter-correlations among the study variables for the entire sample. First, zero-order correlations were reported for the risk assessment measures, assessed at both pre-treatment and post-treatment. Table 2 shows the relationship between static and dynamic risk. Consistent with prior predictions, all significant coefficients were positively correlated and the amount of variability accounted for ranged from 8% (Static-99 and VRS: F1-post; $r^2 = .08$) to 79% (VRS: F1-pre with VRS: F1-post and VRS: F2-pre and VRS: F2-post; $r^2 = .79$), although the latter associations were examined within, rather than across, instruments. The Static-99 was significantly and positively associated with the STABLE, assessed at both pre-treatment ($r^2 = .23$) and post-treatment ($r^2 = .19$), the VRS: Total score assessed at both pre-treatment ($r^2 = .44$) and post-treatment ($r^2 = .44$), VRS: F2 assessed at both pre-treatment ($r^2 = .30$) and post-treatment ($r^2 = .27$), and finally, the VRS: F1 assessed at post-treatment ($r^2 = .08$).

Next, zero-order correlation coefficients are displayed in Table 3 for the self-reported treatment targets for the entire sample and were generally supportive of the present hypotheses. Among the significant coefficients, the amount of variability accounted for ranged from 5% (Bumby-M and AI-Hostility; $r^2 = .05$) to 74% (CMEM: 3 and REM: 1; $r^2 = .74$). The majority of the SOARS subscales were positively and significantly inter-correlated but no coefficient accounted for more than 54% of the variance. The associations between the SOARS subscales and the other assessed treatment targets were as follows: The ASO was positively correlated with the CMEM: 2, CMEM: 3, REM: 1, and REM: 3 and

negatively correlated with the Bumby-R scale. The AOP was positively correlated with the CMEM: 3 and negatively correlated with the Bumby-R scale. The AVH was positively association with empathy (CMEM: 2, CMEM: 3, REM: 1, and REM: 3) and negatively associated with both Bumby scales. The MC subscale demonstrated a positive association with the CMEM: 3 and REM: 3 and a negative relationship with the Bumby-R scale. The JSO subscale showed a positive relationship with the CMEM: 3, whereas the ASI subscale evidenced a positive relationship with AI-Anger.

Cognitive distortions pertaining to underage victims (i.e., Bumby-M) were positively associated with the Bumby-R, AI: Hostility and negatively associated with the CMEM: 2 and CMEM: 3. Similarly, the Bumby-R scale was positively associated with AI: Hostility and negatively associated with the CMEM: 2, CMEM: 3, and REM: 3. Higher scores on the MSIS (i.e., fewer problems with intimacy) were negatively correlated with the UCLA, AI: Anger, and AI: Hostility. Higher scores on the UCLA were positively correlated with the physical, anger, and hostility subscales of the aggression inventory. As expected, there were significant correlations among all AI subscales, with the highest relationship accounting for 56 % of the variance. In terms of the empathy measures, the highest variation accounted for was 74 %.

Finally, the concurrent validity of the self-report assessment instruments was partially explored by examining correlations with validated risk assessment instruments, as a significant relationship would indicate that the assessed treatment need may be criminogenic in nature. Table 4 shows the zero-order and first-order correlations, the latter of which controls for SDR when appropriate.

Specifically, higher scores on the Static-99 were significantly and positively correlated with the SOARS (AOP) and AI: Physical subscale, whereas there was a negative association with the Bumby-M scale. The STABLE was positively correlated with the SOARS (MC) and the physical, anger, and hostility subscales of the aggression inventory and negatively correlated with the MSIS. Higher scores on the VRS were associated with higher scores on the SOARS (MC), lowers scores on the MSIS and higher scores on the physical and anger subscales of the aggression inventory. With regard to the VRS: subscales: Factor 1 was significantly and positively associated with the SOARS subscales: ASO, AOP, and MC. Factor 2 was significantly and positively associated with the physical and anger subscales of the aggression inventory, and, Factor 3 was negatively associated with the SOARS (ASO) as well as the CMEM: 2 and CMEM: 3. Of note, when SDR was controlled among the relevant variables, only the relationships between the VRS: F1 and SOARS ASO, AOP, and MC remained statistically significant.

Primary Hypothesis One: Group Comparisons

A series of between-subjects analysis of variance (ANOVA), analysis of covariance (ANCOVA), or chi-square analyses were conducted to evaluate hypothesis one; that is, to examine differences in demographic/offence-related variables, type of victim, actuarial risk, and self-reported treatment targets among individuals following different pathways to sexual offending. Given the small number of participants who completed the REM, this variable was deleted from all subsequent analyses.

Levene's test for homogeneity of variances were calculated for each between-subjects comparison (using a more liberal criterion for statistical significance), indicating violations for length of sentence, $F(3, 231) = 8.01, p < .001$ number of victims on index

offence, $F(3, 267) = 17.68$, $p < .001$, number of victims (overall), $F(3, 271) = 13.67$, $p < .001$, the violence of the offence, $F(3, 271) = 41.83$, $p < .001$, the Static-99, $F(3, 271) = 9.11$, $p < .001$, SOARS (ASO), $F(3, 259) = 2.77$, $p < .05$, SOARS (AOP), $F(3, 259) = 3.73$, $p < .05$, SOARS (AVH), $F(3, 259) = 8.40$, $p < .001$, SOARS (ASI), $F(3, 259) = 2.93$, $p < .05$, UCLA, $F(3, 239) = 2.89$, $p < .05$, and, AI: Anger, $F(3, 242) = 3.15$, $p < .05$. As such, the Welch procedure was employed (see Howell, 2002). Post-hoc analyses utilized Tukey's HSD test and effect sizes are provided, as described earlier.

Description of participants in relation to offence pathway

With regard to the demographic and offence-related variables, as shown in Table 5, ANOVA indicated that offender age at start of sentence commencement was significantly different across the four offence pathways, $F(3, 271) = 6.62$, $p < .001$, $\omega^2 = .06$. Post-hoc analyses revealed that offenders following an approach-automatic pathway were significantly younger than individuals following an avoidant-passive pathway [$d = 0.58$; 95% confidence interval (95% *CI*) = 0.23 - 0.94)], avoidant-active pathway ($d = 0.88$; 95% *CI* = 0.50 - 1.27), and an approach-explicit pathway ($d = 0.48$; 95% *CI* = 0.18 - 0.78).

In terms of length of sentence, ANOVA revealed a significant and moderate effect $F(3, 120.6) = 6.96$, $p < .001$, $\omega^2 = .06$. In particular, individuals following an approach-explicit pathway received significantly longer sentences as compared to individuals following an avoidant-passive pathway ($d = 0.67$: 95% *CI* = 0.31 – 1.03) and an avoidant-active pathway ($d = 0.54$: 95% *CI* = 0.16 – 0.92). Additional analyses on sentence length revealed that 14.5% ($n = 40$) of the participants were given an indeterminate sentence. The relationship between an indeterminate sentence and pathway to sexual offending was statistically dependent, χ^2 ($df = 3$, $n = 275$) = 22.81, $p < .001$, Cramér's $V = .29$. That is,

among individuals with an indeterminate sentence, 2.5% followed an avoidant-passive pathway (z = -3.0) and 2.5% followed an avoidant-active pathway (z = -2.6). In contrast, 30% of individuals with an indeterminate sentence followed an approach-automatic pathway (z = 0.4) and 65% followed an approach-explicit pathway (z = 4.0).

With regard to offence-related variables, ANOVA demonstrated a moderate and significant effect of offence pathway on number of victims incurred throughout the individuals' criminal history, $F(3, 147.6) = 12.81$, $p < .001$, $\omega^2 = .11$. Post-hoc analyses showed that offenders following an approach-explicit pathway had offended against a greater number of victims than individuals classified to the avoidant-passive pathway (d = 0.79; 95% CI = 0.45 - 1.13), avoidant-active pathway (d = 0.71; 95% CI = 0.35 - 1.07), and the approach-automatic pathway (d = 0.51; 95% CI = 0.21 - 0.81). There was also a significant and large effect of offence pathway on the violence of the index offence, $F(3, 147.8) = 30.08$, $p < .001$, $\omega^2 = .16$. Specifically, offenders exhibiting an avoidant-passive offence pathway were less violent than the approach-automatic pathway (d = 0.95; 95% CI = 0.58 – 1.32) and the approach-explicit pathway (d = 0.87; 95% CI = 0.52 – 1.20). Similarly, individuals following an avoidant-active pathway were less violent than the approach-automatic (d = 1.00; 95% CI = 0.61 - 1.39) and approach-explicit offence pathways (d = 0.90; 95% CI = 0.53 - 1.27).

Finally, there were moderate and significant main effects for offence pathway and previous sexual [$F(3, 128.5) = 18.07$, $p < .001$, $\omega^2 = .10$], violent [$F(3, 142.1) = 24.85$, $p < .001$, $\omega^2 = .14$], and criminal charges or convictions [$F(3, 132.2) = 14.52$, $p < .001$, $\omega^2 = .09$]. Individuals following an avoidant-passive pathway exhibited fewer previous sexual charges or convictions than both the approach-automatic (d = 0.71; 95% CI = 0.35 - 1.07)

and approach-explicit offence pathways (d = 0.77; 95% CI = 0.43 - 1.11). The avoidant-active pathway also showed fewer sexual offences when compared to the approach-explicit offence pathway (d = 0.63; 95% CI = 0.27 - 0.98). A similar pattern was evident among offence pathways when examining previous violent and criminal charges. However, a notable difference among these two outcome measures was that offenders following an avoidant-active pathway had fewer previous violent and criminal offences than offenders following an approach-automatic pathway (d = 0.79; 95% CI = 0.41 - 1.17 and d = 0.65; 95% CI = 0.27 - 1.03, for violent and criminal offences respectively).

Type of sexual offender

To test the hypothesis that different types of offenders follow different offence pathways, a Chi-square analysis was conducted and the pathway composition among offender type was compared. Table 6 presents these comparisons. Results indicated that there was a dependent relationship between type of sexual offender and offence pathway, χ^2 (df = 9, n = 275) = 123.4, $p < .001$, Cramér's V = .39. As shown in table 6, individuals who offended against an adult victim were predominantly classified as an approach pathway, particularly the approach-automatic pathway (57.6%). Among child molesters, individuals who offended outside the family unit were predominantly classified to the approach-explicit pathway, whereas the intra-familial offenders were most likely to follow an avoidant-passive pathway. Finally, individuals who offended against different victim types (i.e., mixed offenders) predominantly followed an approach-explicit pathway (48.3%).

In order to further test the dependent relationship between type of sexual offender and offence pathway, differences between observed and expected values within each cell (i.e., the adjusted standardized residuals) were examined. As indicated in Table 6,

departures from independence were noted across rapists, extra-familial child molesters, and intra-familial child molesters. In particular, individuals who had offended against an adult female victim were less likely to have followed an avoidant-passive pathway (z = -4.5) and an avoidant-active pathway (z = -4.9), and were more likely to have followed an approach-automatic pathway (z = 7.6) than would be expected by chance. The intra-familial child molesters were more likely to have followed either the avoidant-passive and avoidant-active pathways (z's = 7.6 and 3.5, respectively) and were less likely to have been assessed as an approach-automatic (z = -6.1) and approach-explicit (z = -3.4) pathways when compared to chance predictions. No other differences between observed and expected values in the cells were noted.

Static and pre-treatment dynamic risk assessment measures

The four offence pathways were compared on static and dynamic risk assessment measures in a series of one-way, between subjects ANOVA's. Although main effects are evaluated at the criterion for statistical significance indicated earlier (i.e., $p <$ .0004), Howell (2002) and Wilcox (1987) have discussed reasons for ignoring the overall F-test when examining post-hoc multiple comparisons in ANOVA. Consequently, all significant post-hoc comparisons will be highlighted in the Tables, although to be consistent with conventional reporting standards, only findings that have a significant omnibus F will be described in text.

As indicated in Table 7, ANOVA indicated a large and significant effect of offence pathway on Static-99 score, $F(3, 138.6) = 64.98$, $p < .001$, $\omega^2 = .36$. Post-hoc analyses showed that offenders following an avoidant-passive pathway had lower scores on the Static-99 than individuals classified as an approach-automatic pathway (d = 1.80; 95% CI =

1.39-2.21) and approach-explicit pathway (d = 1.55; 95% CI = 1.18 – 1.92). Similarly, offenders following an avoidant-active offence pathway were assessed as lower risk on the Static-99 than offenders following the approach-automatic pathway (d = 1.59; 95% CI = 1.17 – 2.01) and approach-explicit pathway (d = 1.37; 95% CI = 0.98 – 1.75).

In terms of dynamic risk, ANOVA demonstrated a moderate and significant effects for the STABLE, $F(3, 225) = 8.92$, $p < .001$, $\omega^2 = .09$ and large effects for the VRS: Total Score, $F(3, 179) = 11.16$, $p < .001$, $\omega^2 = .14$ VRS: F1, $F(3, 170) = 12.41$, $p < .001$, $\omega^2 = .16$ and VRS: F2, $F(3, 170) = 13.62$, $p < .001$, $\omega^2 = .18$. Post-hoc analyses revealed that the avoidant-passive offence pathway and avoidant-active offence pathway obtained lower scores on the STABLE when compared to individuals following the approach-explicit offence pathway (d = 0.80; 95% CI = 0.43 – 1.18 and d = 0.82; 95% CI = 0.42 – 1.22, respectively).

With regard to the VRS: Total score, the avoidant-passive offence pathway obtained lower scores than the approach-automatic pathway (d = 0.61; 95% CI = 0.15 – 1.06) and the approach-explicit pathway (d = 1.03; 95% CI = 0.59 – 1.46). The avoidant-active pathway was also assessed as lower risk than the approach-explicit pathway (d = 0.95; 95% CI = 0.52 – 1.38). Closer inspection of the VRS factors revealed that individuals following an approach-automatic pathway obtained lower scores on Factor 1 (i.e., sexual deviancy) than the avoidant-passive (d = 0.68; 95% CI = 0.22 – 1.15), avoidant-active (d = 0.80; 95% CI = 0.34 – 1.27), and approach-explicit (d = 1.18; 95% CI = 0.77 – 1.60) pathways. Finally, individuals following an avoidant-passive pathway obtained lower scores on the VRS: F2 (i.e., criminality) than offenders following an approach-automatic (d = 1.14; 95% CI = 0.65 – 1.62) and approach-explicit (d = 0.73; 95% CI = 0.29 – 1.16) offence pathway. Similarly,

individuals following an avoidant-active offence pathway obtained lower scores in criminality than offenders classified to the approach-automatic (d = 1.32; 95% CI = 0.83 – 1.82) and approach-explicit (d = 0.86; 95% CI = 0.43 – 1.29) offence pathways.

Self-reported treatment targets

The four offence pathways were compared on the self-reported treatment targets assessed at pre-treatment in a series of one-way, between subjects ANOVAs and ANCOVAs, the latter of which controlled for SDR among the relevant variables identified in Figure 3. As indicated earlier, some authors have indicated that statistical control methods may reduce the true relationship between independent variables and the outcome measure and, as such, both standard and estimated marginal means are indicated in Tables 8 and 9, respectively.

As indicated in Table 8, ANOVA demonstrated moderate and significant effects for the ASO, $F(3, 125.47) = 5.52$, $p < .001$, $\omega^2 = .06$ and the AOP, $F(3, 125.13) = 8.93$, $p < .001$, $\omega^2 = .09$ subscales of the SOARS. Post-hoc analysis revealed that individuals following an approach-automatic pathway scored significantly lower than the avoidant-passive (d = 0.52; 95% CI = 0.15 – 0.88), avoidant-active (d = 0.69; 95% CI = 0.31 – 1.08), and the approach-explicit (d = 0.53; 95% CI = 0.22 – 0.84) offence pathways. In terms of the AOP subscale, offenders following an approach-explicit offence pathway scored higher than offenders following an avoidant-passive (d = 0.61; 95% CI = 0.27 – 0.96) and approach-automatic (d = 0.72; 95% CI = 0.41 – 1.04) pathway. None of the other self-reported treatment targets were differentiated among the four offence pathways, when using the conservative criterion for statistical significance.

When controlling for SDR, ANCOVA also revealed moderate and significant effects for the ASO, $F(3, 235) = 7.03, p < .001, \omega^2 = .07$ and the AOP, $F(3, 235) = 10.05, p < .001, \omega^2 = .09$ subscales of the SOARS. Post-hoc comparisons for the ASO and AOP subscales were similar to the ANOVA results reported earlier. A notable difference, however, was that, individuals following an approach-automatic pathway scored significantly lower on the AOP subscale than individuals following the avoidant-active offence pathway ($d = 4.34$; 95% $CI = 3.64 - 5.05$). None of the other self-reported treatment targets were differentiated among the four offence pathways, after controlling for SDR and when using the conservative criterion for statistical significance.

Predicting pathway membership

A polytomous logistic regression analysis was performed through SPSS NOMREG to assess prediction of membership in one of the four pathways to sexual offending. Relevant predictor variables demonstrating discriminant validity across pathways were utilized (Static-99, Stable 2000, VRS: Total Score, VRS: F1, VRS: F2, and SOARS's subscales: ASO and AOP). In terms of the deviance criterion, results indicated a good model fit (discrimination among groups) on the basis of the predictor variables, χ^2 ($df = 447$, $n = 157$) = 291.99, p = ns, Nagelkerke $R^2 = .62$. On the basis of the seven predictor variables, overall classification was 57.3%. More specifically, correct classification rates were 59.4% for individuals following an avoidant-passive pathway, 43.8% for individuals following an avoidant-active pathway, 57.5% for individuals following the approach-automatic pathway, and 64.2% for the approach-explicit offence pathway.

Relevant parameter estimates, including odds ratios, are displayed in Table 10. The odds ratio indicated that for every unit increase in Static-99 score, the predicted odds of an

individual being classified as an avoidant-passive pathway, compared to an approach-explicit pathway (the reference group) decreased by 76 % ($e^{-1.44}$). Moreover, the odds ratio for the avoidant-active/approach-explicit contrast indicated that for every unit increase in Static-99 score, the predicted odds of an individual being classified as an avoidant-active pathway, compared to the reference group decreased by 56 % ($e^{-.82}$).

A test of individual model parameters by comparing the difference in -2LL for the overall model with a nested model, indicated that only the Static-99, χ^2 ($df = 3$, $n = 157$) = 46.08, $p < .001$, should be included in a subsequent and more parsimonious model. However, the SOARS (ASO) was also included as this variable approached statistical significance, χ^2 ($df = 3$, $n = 157$) = 6.43, $p = .09$. A polytomous logistic regression was performed on the more parsimonious model to assess prediction in one of the four pathways to sexual offending on the basis of static risk (i.e., Static-99) and the degree of acceptance of the sexual offence (i.e., SOARS; ASO). In terms of the deviance criterion, results indicated a good model fit (discrimination among groups) on the basis of the two predictor variables, χ^2 ($df = 372$, $n = 263$) = 305.46, p = ns, Nagelkerke $R^2 = .47$. On the basis of the two predictor variables, overall classification was 48.3%. More specifically, correct classification rates were 70.6% for individuals following an avoidant-passive pathway, only 4.5% for individuals following an avoidant-active pathway, 30% for individuals following the approach-automatic pathway, and 69.4% for the approach-explicit offence pathway.

Relevant parameter estimates, including odds ratios are displayed in Table 11. With regard to the first contrast (avoidant-passive versus approach-explicit), the odds ratios indicated that for every unit increase in Static-99 score, the predicted odds of an individual being classified as an avoidant-passive pathway decreased by 63% ($e^{-.99}$). With regard to the

second contrast (avoidant-active versus approach-explicit), the odds ratio indicated that for every unit increase in Static-99 score, the predicted odds of an individual being classified as an avoidant-active pathway decreased by 56 % ($e^{-.81}$). Finally, within the last contrast, the odds ratio indicated that for every unit increase in the SOARS (ASO), the predicted odds of an individual being classified as an approach-automatic pathway decreased by 8 % ($e^{-.08}$).

Primary Hypothesis Two: Pre-Post Treatment Change

A series of 2X2 mixed model repeated measures ANOVA's (or ANCOVA's to control for SDR) were conducted to address the hypothesis that treatment will positively impact assessed risk to re-offend and self-reported treatment targets, the latter of which have either been theoretically or empirically linked with future sexual offending. Moreover, it was hypothesized that pathway to sexual offending would function as a significant moderator variable, such that treatment effects would not be uniform across pathway. As such, the pre-post score served as the repeated measures factor and offence pathway was the between-subjects factor.

With regard to dynamic risk assessment instruments (see Figures 4 – 8), repeated measures ANOVA revealed significant main effects for the STABLE, $F(1, 192) = 88.24$, $p < .001$, $\eta_p^2 = .32$; VRS: Total Score, $F(1, 149) = 103.89$, $p < .001$, $\eta_p^2 = .41$; as well as, VRS: F1, $F(1, 133) = 96.19$, $p < .001$, $\eta_p^2 = .42$; VRS: F2, $F(1, 131) = 85.30$, $p < .001$, $\eta_p^2 = .39$; and, VRS: F3, $F(1, 135) = 112.51$, $p < .001$, $\eta_p^2 = .46$. There were no significant interactions between change in risk and offence pathway, suggesting that individuals, regardless of offence pathway, were assessed as lower risk post-treatment, as compared to their pre-treatment risk scores.

In addition to established risk factors, CSCs NaSOP's targets a variety of treatment needs that are assumed to be linked to future sexual aggression (see Figures 9 – 25). In terms of treatment change, irrespective of offence pathway, results revealed main effects for the following SOARS subscales: ASO, $F(1, 220) = 14.43, p < .001, \eta_p^2 = .06$; AOP, $F(1, 220) = 18.91, p < .001, \eta_p^2 = .08$; and AVH, $F(1, 220) = 13.13, p < .001, \eta_p^2 = .06$. Additional main effects were noted for the Bumby-M, $F(1, 218) = 155.16, p < .001, \eta_p^2 = .42$; Bumby-R, $F(1, 223) = 217.73, p < .001, \eta_p^2 = .49$; UCLA, $F(1, 204) = 35.5, p < .001, \eta_p^2 = .15$; CMEM:2, $F(1, 152) = 24.52, p < .001, \eta_p^2 = .14$; and, CMEM:3, $F(1, 151) = 36.93, p < .001, \eta_p^2 = .20$.

The impact of offence pathway on treatment change was assessed on the above noted treatment targets and a significant interaction was evident for the ASO, $F(3, 220) = 6.21, p < .001, \eta_p^2 = .06$ and the Bumby-M scales, $F(3, 218) = 9.07, p < .001, \eta_p^2 = .11$. For the ASO subscale, an analysis of simple effects revealed that individuals following an approach-automatic, $F(1, 220) = 77.37, p < .001$, and approach-explicit, $F(1, 220) = 18.77, p < .001$, offence pathway demonstrated reliable change from pre-treatment to post-treatment, whereas individuals possessing an avoidance goal toward offending did not significantly change. For the Bumby-M scale, however, an analysis of simple effects revealed that the avoidant-passive, avoidant-active, and approach-explicit pathways significantly changed from pre-treatment to post-treatment, whereas the approach-automatic pathway did not demonstrate a significant change, $F(1, 218) = 6.14, p =$ ns.

Given the ambiguous nature of statistical control methods described earlier, each variable that was assessed for change following treatment was also assessed without controlling for SDR. Results were largely consistent with the analyses using the BIDR as a

covariate with one notable exception. Specifically, results revealed a main effect for the hostility subscale of the AI, $F(1, 214) = 12.03$, $p < .001$, $\eta_p^2 = .06$, suggesting that treatment produced positive effects on this treatment target, irrespective of offence pathway. No significant interactions, other than those highlighted above, were noted.

Based on the risk principle outlined earlier (Andres & Bonta, 1998), it could also be argued that change following treatment was influenced by risk, rather than pathway classification. As such, analyses assessing pre-post treatment change, as a function of offence pathway classification, was conducted with risk to re-offend (i.e., Static-99) as a covariate. Results were largely consistent with the analyses reported above with the following exceptions. A main effect was no longer evident for the SOARS (AVH), $F(1, 219) = 9.21$, $p = .003$, $\eta_p^2 = .04$, suggesting that treatment participation did not result in change after controlling for prior risk level and the interaction between pre-post change and pathway classification on the Bumby-M scale was no longer evident, $F(3, 217) = 3.57$, $p = .02$, $\eta_p^2 = .05$.

Discussion

Results of the present study support the validity of the self-regulation model with respect to the four pathways to sexual offending, as well as some of the advantages of this model over the relapse prevention model. Since its theoretical development (Ward & Hudson, 1998), the self-regulation model has been implemented in several correctional services, including, Australia, Canada (Yates et al., 2000), the United Kingdom, and parts of the United States (Yates & Ward, in press). Despite the widespread incorporation of the model in sexual offender treatment programs, there remains an absence of in-depth empirical investigation.

As indicated earlier, the self-regulation model has been proposed as an alternative to relapse prevention as a framework with which to treat sexual offenders, due to the former models shortcomings described earlier (Ward & Hudson, 1998; Yates & Kingston, 2005). The self-regulation model has several theoretical advantages including adherence to the principles of effective correctional intervention (i.e., risk, need, and responsivity; Andrews & Bonta, 1998). Indeed, the flexibility embedded within the self-regulation model exhibits greater potential to account for differing self-regulatory styles, dynamic risk factors, personal circumstances, as well as other issues related to responsivity and therapeutic process (Marshall et al., 2006). These issues are particularly relevant to the treatment of sexual offenders, given recent findings suggesting that interventions based strictly on the principles of relapse prevention have been ineffective in reducing re-offending among this population (Marques et al., 2005).

In the present investigation, I examined the validity of the self-regulation model of sexual offending among a sample of federally incarcerated adult male sexual offenders. In contrast to previous studies, this investigation used a structured assessment tool to allocate offence pathway. As indicated earlier, the PC (Kingston, 2006) is a structured protocol based on the previous theoretical and empirical research on the self-regulation model and separately codes offence-related goals and offence strategies. Each item is scored on a 0-2 scale based on the presence of indicators for each item and scores are summed and combined to determine the predominant offence pathway. The classification of offence pathway yielded substantial reliability (Landis & Koch, 1977), which was similar to an earlier study using file-review (Bickley & Beech, 2002) and better than a more recent study using offender files to determine offence progression (Yates & Kingston, 2006). Additionally, scores on the PC resulted in a reasonable distribution of offence pathways, which again, was similar to previous investigations.

Preliminary analyses were conducted to establish the validity of the overall assessment battery used throughout Correctional Service of Canada's national sexual offender programs (CSC's NaSOP) and to elucidate the role of the various treatment targets and/or criminogenic needs targeted by these programs. In addition to these preliminary analyses, there were two primary hypotheses: (1) to examine the extent to which offenders following different pathways demonstrate variation on offence-related variables (e.g., degree of sexual intrusiveness), victim selection (i.e., type of sexual offender), actuarial risk, and self-reported treatment targets; and, (2) to examine the impact of CSC's NaSOP in facilitating change on the various self-reported treatment targets and whether offence pathway is differentially impacted by current intervention strategies.

Relationship Among Study Variables

Prior to examining the main hypotheses, the first set of analyses utilized zero-order and first-order correlations among the measures utilized in the NaSOP's assessment battery. First, inter-correlations among risk assessment instruments were generally as expected. That is, actuarial assessment instruments were, for the most part, significantly and positively correlated, although no two instruments explained more than 60% of the variance, suggesting that these instruments are measuring related but not identical constructs.

With regard to the self-reported treatment targets, it is important to note that several measures were significantly correlated with socially desirable responding. Specifically, individuals who demonstrated a propensity toward socially desirable responses were more likely to minimize their sexual offences, degree of offence planning, and their level of deviant sexual interest. They were also less likely to accept the degree of significant harm caused to their victims and were less likely to exhibit motivation for change. Socially desirable responding was also significantly associated with the perceived level of social functioning, such that individuals providing socially desirable responses also tended to report fewer problems with intimacy and loneliness. Significant associations were also revealed for emotion management, such that individuals who dissimulate reported lower levels of aggression expressed in a variety of ways (i.e., physical aggression, verbal aggression, anger, and hostility). Finally, individuals engaging in impression management reported greater levels of empathy toward their own victims (among rapists only).

The associations between socially desirable responding and measures assessing denial and minimization, social functioning, emotion management, and empathy point to a potential confound when analyzing these self-assessed treatment targets (Paulhus, 1984)

and, therefore, statistical control methods were employed to partial out this effect. However, some investigators suggest that social desirability may be an underlying personality correlate of behaviour (Mills & Kroner, 2005, 2006) and that statistical control methods may actually diminish the true relationship between variables of interest. As such, the present study reported results with and without the BIDR as a covariate.

The assessment measures in the NaSOP battery were included because they were considered important treatment targets, which were either theoretically or empirically linked with sexual offending (i.e., criminogenic needs). In a recent meta-analysis, Hanson and Morton-Bourgon (2005) quantitatively summarized the extant literature concerning risk factors related to recidivism among sexual offenders in order to identify important static predictors and criminogenic needs. With regard to dynamic risk factors, Hanson and Morton-Bourgon identified factors associated with sexual deviancy (e.g., deviant sexual preference), antisocial personality (e.g., psychopathy), and antisocial traits (e.g., hostility) as reliable predictors of re-offending and victim empathy, denial, and low motivation for treatment, as unrelated to recidivism.

The concurrent validity of the self-report measures in the NaSOP database was assessed via correlations with established risk assessment instruments (i.e., whether they were identifying criminogenic needs)[2]. As noted by Nunes and Cortoni (2007), however, a relationship between a self-report measure and a risk assessment measure does not identify the former instruments' predictive validity, especially given that risk assessment instruments are imperfect at predicting risk (Kingston et al., 2008). Nevertheless, results of the present

[2] Results are discussed without partially out the effects of social desirability. The rationale has been described in text and by Mills and Kroner (2005, 2006)

study provided tentative support for intimacy, emotion management, denial and minimization, and cognitive distortions as criminogenic needs.

First, greater levels of perceived intimacy were inversely related to the two dynamic risk assessment measures, suggesting that individuals who exhibit greater levels of intimacy in their romantic relationships are at lower risk to re-offend. This finding is generally consistent with a growing body of literature identifying social functioning deficits as an integral component of etiological theories of sexual offending (Marshall, 1989; Marshall, Serran, & Cortoni, 2000; Ward et al., 2006) and there is some support for intimacy deficits' predictive validity (Hanson & Harris, 2001; Hanson, Harris, Scott, & Helmus, 2007; Hanson & Morton-Bourgon, 2005).

Results also demonstrated positive associations between the physical, anger, and hostility subscales of the AI with actuarial risk, suggesting that problems with emotion regulation are valid dynamic risk factors. With regard to antisocial attitudes and an overall antisocial orientation, the present study indicated that attitudes supporting sexual aggression against children may be a criminogenic need. Although the relationship between attitudes tolerant of sexual offending and recidivism has been questioned recently (Hanson et al., 2007), deficits in emotion regulation in general, and problems with anger/hostility in particular, have typically been associated with recidivism among sexually aggressive men (Firestone, Nunes, Moulden, Broom, & Bradford, 2005; Hanson & Morton-Bourgon, 2005; Kingston, Firestone, Wexler, & Bradford, 2008) and these individual characteristics are often prominent in theories of sexual offending (e.g., Malamuth, 2003).

Results indicated that denial was inversely related to risk for re-offending; that is, individuals exhibiting lower levels of denial and minimization were rated as higher risk to

re-offend. Previous investigations have typically equated denial as a non-criminogenic need (Hanson & Morton-Bourgon, 2005), although recent evidence has shown denial to be a minor risk factor for some sexual offenders (Nunes et al., 2007). Despite these previous findings, denial continues to be regarded as a risk factor for sexual aggression and is often grounds for exclusion from a treatment program (Marshall et al., 2006; Yates, 2009).

The somewhat surprising relationship between risk and denial could have resulted from offenders' willingness to disclose various aspects of their offence during the initial intake assessment (see Nunes et al., 2007). In other words, individuals in a state of denial may be less likely to disclose additional information (e.g., presence of a male victim) that would otherwise increase risk.

Another possible explanation for the inverse relationship between risk and denial stems from the social-psychological research highlighting the role of self-presentation and the effect this has on subsequent self-appraisals and the eventual transformation into schema (Kelly, 2000; Stiles & Shapiro, 1994). The general psychotherapeutic literature has indicated that positive self-presentation contributes to the internalization of a presented self-image, in the form of schema, over the course of therapy (Schlenker, Dlugolecki, & Doherty, 1994). As such, individuals who present themselves in a relatively pro-social manner, despite their actual behaviour, may have underlying schema that are consistent with their self-presentation. Given the significant association between negative/hostile schema with other risk characteristics predicting sexual aggression (Kingston et al., 2008; Malamuth, 2003) it could be that offenders attempting to rationalize their deviant behaviour may exhibit other low risk characteristics and feel a need to justify their *atypical* behaviour,

whereas offenders admitting their deviant actions may see no need to justify behaviour which is consistent with their internal representations of self.

Finally, the present study found empathy to be unrelated to the Static-99 and the dynamic risk assessment measures, a finding that is consistent with research suggesting that empathy is a non-criminogenic need (Hanson & Morton-Bourgon, 2005). Nevertheless, the present findings revealed that greater victim empathy was associated with greater treatment responsivity, a feature tapping into commitment and personal motivation for change (Wong et al., 2000). This is consistent with previous studies demonstrating that victim empathy is specifically related to motivation to change among sexual offenders (Tierney & McCabe, 2002); a finding that has led some programs to focus on the enhancement of victim empathy prior to the facilitation of other treatment targets (Hildebran & Pithers, 1989; Marshall et al., 2006). The present studies results supports victim empathy, at least as a preliminary treatment target, given the importance of internal motivation on subsequent treatment success (Marshall et al., 2006; Moulden & Marshall, 2005).

Relationships among the predominant needs addressed by the NaSOP are also of clinical relevance, given the importance of individual characteristics and their interactions in contributing to sexual aggression (Kingston, Malamuth, Fedoroff, & Marshall, 2009; Malamuth, 2003). First, empathy is a potentially important therapeutic factor and was inversely related to denial and cognitive distortions toward children and adults. These findings were as expected given the attenuating effects of empathy on antisocial attitudes (Malamuth, 2003) and the understanding that denial may simply represent cognitive distortions that are utilized to justify behaviour and to defer responsibility (Yates, 2009).

Emotion regulation and features of aggression are generally considered important criminogenic needs among general offenders (Andrews & Bonta, 1998) and sexual offenders (Hanson & Morton-Bourgon, 2005). In the present investigation, individuals demonstrating problems with aggression exhibited antisocial attitudes toward children and coercive sex with adults, as well as significantly greater deficits in social functioning and intimacy. The relationships between negative emotionality, hostility, antisocial attitudes, and social functioning were all in expected directions and it was not surprising that the presence of one risk factor was related to another risk factor; in line with research demonstrating the importance of multiple correlates of crime in predicting aggressive behaviour (Malamuth, 2003; Malamuth, Addison, & Koss, 2000).

Primary Hypothesis One: Group Comparisons

In hypothesis one, I predicted that individuals following different offence pathways would evidence variation with respect to offence-related variables, victim selection (i.e., type of sexual offender), as well as scores on actuarial risk assessment instruments and self-reported treatment targets. The hypothesis pertaining to offence variables was partially supported by differences observed between groups with respect to number of victims and offence history. Specifically, individuals following an approach-explicit offence pathway offended against a greater number of victims as compared to individuals following the other three offence pathways. Also, offenders following the two approach pathways were found to have accumulated a significantly greater number of previous offences when compared to individuals following either of the two avoidant pathways. These findings are consistent with previous investigations, suggesting that offenders with approach motivated offence

goals have a greater number of previous offences than offenders exhibiting avoidant motivated goals (Bickely & Beech, 2002, 2003; Yates & Kingston, 2006).

Results of the present study were, however, contrary to the hypothesis pertaining to the intrusiveness of the offence, such that individuals possessing an approach-motivated goal were significantly more violent during the index offence when compared to offenders following either of the avoidant pathways. As indicated above, Ward and Hudson (1998) first theorized that offence pathway would differentially influence the offenders' perception of the victim, which in turn, would influence the intrusiveness of the sexual offence, although this was not empirically based. The association between an approach-motivated goal and intrusiveness in the present study was likely due to the overall characteristics of the sexual offence, especially the type of victim selected. Given that there was a higher prevalence of unknown victims among approach-motivated offenders, it is perhaps not surprising that more force was required in gaining victim compliance among these individuals, when compared to offenders following an avoidant-motivated pathway.

Results of the present study confirmed the hypothesis predicting variability in offence pathway associated with different types of sexual offenders and was consistent with research conducted to date on the model (Yates & Kingston, 2006). Specifically, results showed that intra-familial child molesters tended to follow an avoidant-passive pathway, while rapists tended to follow the approach-oriented pathways, particularly the approach-automatic offence pathway; an offence progression associated with impulsivity and general criminality. Results also revealed a trend suggesting that offenders with heterogeneous victim types followed an approach-explicit pathway, suggesting that this group may possess intact self-regulation, antisocial goals, and may explicitly plan their offences.

Although it is clear that some types of offenders are more concentrated within particular pathways to sexual offending, offence pathways were not exclusively associated with one type of sexual offender, such that all offender types were represented across the four pathways to varying degrees. These findings support the notion that different types of sexual offenders exhibit varying motivations and dynamics of offending and underscores the importance of assessing the dynamics of the offence progression within and across groups of offenders.

The present study also examined differences across pathways with respect to static and dynamic risk. Results supported the hypothesis that offenders following either approach pathway were generally assessed as higher risk to offend according to static and dynamic risk assessment instruments. Further, significant results were revealed when looking at the two broad factors generally attributed to sexual recidivism; that is, sexual deviance and antisocial orientation/lifestyle instability (Doren, 2002; Hanson & Morton-Bourgon, 2005; Malamuth, 2003). Specifically, individuals following the approach-automatic pathway scored low in sexual deviance and high in criminality, supporting the notion that this pathway is characterized by impulsivity with an overall general antisocial orientation (Yates & Kingston, 2006; Yates et al., 2009). Offenders following the approach-explicit offence pathway, while scoring higher in criminality than the two avoidant pathways, were predominantly characterized by a sexually deviant orientation, which again, is consistent with prior empirical and theoretical descriptions of the model (Ward & Hudson, 1998; Yates & Kingston, 2006).

The present study also examined the variability among offence pathway with respect to self-reported treatment targets and/or criminogenic needs assessed prior to treatment.

Results revealed that only denial and minimization involving the sexual offence and degree of offence planning were reliably differentiated across the four pathways. In particular, individuals following an approach-automatic pathway evidenced greater denial regarding the sexual offence compared to individuals following any other offence pathway, whereas individuals classified as an approach-explicit offence pathway demonstrated less minimization related to offence planning than the avoidant-passive and approach-automatic pathways. At first glance, these latter findings suggest that individuals utilizing under-regulated strategies are particularly prone to denying elements of offence planning. However, previous reports have shown that individuals employing such strategies are characterized by impulsivity with little or no planning evident in the sexual offence (Ward & Hudson, 1998; Yates & Kingston, 2005). As such, these findings may be identifying one of the key elements of the self-regulation model, that is, the lack of offence planning characterizing particular pathways and, as such, represents further validation of the self-regulation model.

In addition to the between-group comparisons, results from the polytomous logistic regression analyses highlighted the potential importance of risk and denial/minimization when attempting to predict pathway membership. Indeed, higher static risk to re-offend and greater levels of denial and minimization regarding the sexual offence were particularly important in predicting membership in the approach-explicit and approach-automatic offence pathways, respectively. Although these findings further highlight the importance of these variables in predicting pathway membership, these predictive models must be replicated using independent and larger samples.

In summary, results supported the hypotheses that self-regulation pathway was differentially associated with actuarial risk to re-offend, both within and across pathway types, and that the factors related to sexual recidivism (i.e., sexual deviancy and criminality) were associated with the predicted self-regulation pathway, as delineated in theory and in past research (Ward & Hudson, 1998; Yates & Kingston, 2006). Additionally, treatment needs were also differentially associated with self-regulation pathway supporting the notion that sexual offenders with different offence dynamics and processes present with various levels of risk as well as treatment needs and, therefore, may require flexible and individualized treatment plans.

Primary Hypothesis Two: Pre-Post Treatment Change

In hypothesis two, I predicted that participation in CSC's NaSOP would result in successful pre-post change on all self-reported treatment targets and that offence pathway would serve as an important moderator variable, such that different offence pathways would evidence variation with respect to pre-post treatment change. In order to address this hypothesis, a *within-treatment change* design (Harkins & Beech, 2007) was employed, which examines the degree to which participants demonstrate statistically significant changes in domains that should change as a result of treatment (e.g., risk and self-reported treatment targets).

Results indicated partial support for hypothesis two. Specifically, there were significant and large effects for changes on the STABLE, VRS: Total Score as well as all three factors of the VRS, suggesting that the NaSOP is successfully targeting dynamic risk factors for sexual offending. Results also indicated significant and moderate effects for denial and minimization, suggesting that participation in the NaSOP contributed to greater

acceptance of the sexual offence, acceptance of offence planning, and acceptance of victim harm. Significant and large effects were revealed for social functioning, cognitive distortions toward children and adults, some elements of emotion management (i.e., hostility), as well as empathy toward child victims of sexual assault and the participants' own victim, again suggesting positive changes within these domains. Of note, participation in NaSOP did not produce positive changes on offenders' perceived level of intimacy. These findings are consistent with a previous study of pre-post treatment change of self-reported treatment targets utilizing a CSC sample (see Nunes & Cortoni, 2007).

The second element of hypothesis two was also partially supported. In particular, the impact of offence pathway on treatment change was a significant moderator for the degree of acceptance of the sexual offence, suggesting that NaSOP contributed to positive changes in denial/minimization, among the approach pathways only. In contrast, the significant interaction between offence pathway and cognitive distortions toward children reflect the fact that offenders following an approach-automatic offence pathway did not evidence significant change from pre-treatment to post-treatment, whereas the other three pathways showed significant change. As such, it appears that self-regulation pathway is clinically relevant when evaluating treatment change, at least in terms of denial/minimization and distorted cognitions (Bickley & Beech, 2003). Consequently, utilizing intervention strategies that adequately reflect the diversity on offence process dynamics may increase the efficacy of treatment.

Treatment Implications

Results of the present study suggest a number of implications for the effective rehabilitation of sexual offenders. In general, results support the thesis that different sexual

offenders require diverse treatment approaches that are specifically tailored toward their individualized risk factors and offence dynamics. For example, avoidant-passive and avoidant-active offence pathways are characterized by inhibitory offence goals and the absence of appropriate strategies to attain the intended goal. As such, individuals following either of these two pathways are likely to obtain some benefit from traditional RP based interventions, although some of the limitations of RP outlined earlier would still apply.

Conversely, individuals possessing an approach-motivated goal toward offending, whether they are functionally self-regulated or not, may represent a distinct group of individuals who are not adequately accounted for by the RP model (Ward, Yates, & Long, 2006; Yates et al., 2009); a hypothesis that is supported by results of the present study. In other words, rather than focusing on improving self-regulatory strategies to avoid offending, offenders following either approach-pathway are likely to benefit from treatment that targets attitudes supportive of sexual aggression, effective emotion management, along with a higher level of monitoring and supervision once released to the community (Yates & Kingston, 2006). Additional differences for treatment were noted within the two approach-motivated pathways. That is, individuals possessing intact self-regulation would benefit from treatment that targets elements of sexual deviance, whereas individuals following the approach-automatic pathway may be more suitable for interventions that go beyond sex offender specific domains (i.e., general criminogenic needs). Taken together, results suggest that sexual offenders undergoing treatment should receive interventions that are empirically based -- that is, formulated from a cognitive-behavioural approach that is matched to risk and need (Andrews & Bonta, 1998), but the offence pathway followed should also be assessed and considered in the formulation of an effective treatment plan.

Limitations

One of the primary limitations of the present study was that the method of allocating offence pathway was based on retrospective file review. This procedure may neglect to uncover important internal motivations that would be evident in a more comprehensive interview/file review methodology (Yates et al., 2009). One potential implication of this methodology would be the over-representation of offenders in the two approach pathways, since file documentation tends to focus on the period immediately preceding the offence, at which time all offenders are hypothesized to experience approach-related goals (Ward & Hudson, 1998). Although the proportions of offence pathways were not severely skewed, there was an over-representation of the two approach pathways. Nonetheless, file review has been shown to adequately differentiate and allocate offence pathways in a previous study (Yates & Kingston, 2006) which was based on a similar but more unstructured guide. It should also be noted that the reliability of the coding procedure in the present study was substantial according to conventional standards and was generally similar, or in some cases better, than other studies (Bickley & Beech, 2002; Yates & Kingston, 2006).

Another limitation pertained to data collection and the determination of reliability of the self-reported treatment targets. Specifically, some of the data collection was conducted during the initial stages of substantial changes to the implementation of sexual offender programs nationally, including the implementation of the assessment battery that had not been previously required. As such, some data were sent with individual item scores over a secured network drive, whereas other data sets contained score totals only that were obtained at a later time period. Consequently, reliability of the self-reported treatment targets could not be evaluated, as preference was given to obtaining a sufficient sample size.

Nevertheless, a portion of the present data was evaluated in a separate study (Nunes & Cortoni, 2007) and results revealed acceptable reliability coefficients for the self-report measures (with the exception of the SOARS: JSO).

Finally, the analysis regarding pre-post change (i.e., the within-treatment change design) offers several advantages over other methods in evaluating treatment outcome, such as the avoidance of problems related to cohort effects and differences in follow-up times; however, it does not provide unequivocal evidence for treatment success because of the lack of a comparison group (Harkins & Beech, 2007). Additionally, no relationship with actual recidivism was provided and there is insufficient evidence that change on dynamic risk factors is associated with actual reductions in recidivism (Hanson et al., 2009). This limitation points to the necessity of future research investigations exploring recidivism outcomes when analyzing offence pathways.

Concluding Comments and Future Research

The utility of sexual offender treatment has been widely debated (Marshall, 2006; Seto et al., 2008) and despite some valid methodological criticisms of the outcome literature (Rice & Harris, 2005), recent evidence has suggested that certain types of interventions are effective at reducing the likelihood of recidivism among sexual offenders (Hanson, Bourgon, Helmus, & Hodgson, 2009; Hanson et al., 2002; Lösel & Schmucker, 2005; Marshall et al., 2006). Although more methodologically sound treatment designs are important, investigations should direct further attention toward what type of treatment is most successful. Indeed, a thorough understanding of the specific offence processes and dynamics, as evident in individual offence pathways, is an important avenue for future research. Investigations should also include larger and more representative samples in order

to better analyze the characteristics of self-regulation pathways. Finally, it will be vital to determine whether offenders following different offence pathways re-offend at different rates and whether correctional programs guided by RP or self-regulation principles provide differential treatment effects among individuals following different pathways to sexual offending.

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Table 1.

Reliability of Classification of Offence Pathway (n = 85)

	Rater 1			
Rater 2	Av-Pass	Av-Act	App-Aut	App-Exp
Av-Pass	**17**	2	0	0
Av-Act	2	**14**	0	1
App-Aut	5	2	**19**	3
App-Exp	0	0	4	**16**
Agreement	N = 24 70.8%	N = 18 77.7%	N = 23 82.6%	N = 20 80%

Note. Av-Pass = Avoidant-Passive. Av-Act = Avoidant-Active. App-Aut = Approach-Automatic. App-Exp = Approach-Explicit.

Table 2

Inter-Correlation Matrix for Static and Dynamic Risk Assessment Instruments

	1	2	3	4	5	6	7	8	9	10	11
1. Static-99	-	.48† (229)	.44† (208)	.66† (183)	.21** (174)	.55† (174)	.05 (174)	.66† (153)	.29† (142)	.52† (140)	.05 (144)
2. STABLE Pre		-	.66† (196)	.77† (169)	.42† (160)	.66† (160)	.41† (160)	.64† (141)	.37† (130)	.56† (130)	.21* (132)
3. STABLE Post			-	.61† (152)	.37† (146)	.43† (146)	.19* (146)	.68† (137)	.48† (127)	.52† (125)	.26** (128)
4. VRS: Total Pre				-	.62† (174)	.81† (174)	.47† (174)	.86† (153)	.57† (142)	.70† (140)	.28** (144)
5. VRS:F1 Pre					-	.11 (174)	.12 (174)	.52† (147)	.89† (137)	.05 (135)	-.02 (139)
6. VRS:F2 Pre						-	.39† (174)	.65† (147)	.07 (137)	.89† (135)	.22* (139)
7. VRS:F3 Pre							-	.41† (147)	.09 (137)	.36† (135)	.84† (139)
8. VRS: Total Post								-	.64† (142)	.79† (140)	.48† (144)
9. VRS:F1 Post									-	.15 (138)	.15 (140)
10. VRS:F2 Post										-	.41† (138)
11. VRS:F3 Post											-

Note. VRS:F1 = Violence Risk Scale: Sex Offender Version: Factor 1. VRS:F2 = Violence Risk Scale: Sex Offender Version: Factor 2. VRS:F3 = Violence Risk Scale: Sex Offender Version: Factor 3. Pre = Pre-Treatment. Post = Post-Treatment. Sample sizes are in parentheses.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. † $p < .001$, two-tailed

Table 3

Inter-Correlation Matrix for Treatment Targets (Pre-Treatment Self-Report Instruments)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 SOARS ASO	38† (263)	73† (263)	59† (263)	12* (263)	42† (263)	-21** (244)	-44† (248)	-06 (252)	07 (236)	-07 (247)	01 (247)	-04 (246)	-04 (247)	05 (174)	34† (174)	48† (174)	44† (93)	04 (92)	56† (92)
2 SOARS AOP	-	32† (263)	44† (263)	01 (263)	51† (263)	-14* (244)	-25† (248)	-14* (252)	-01 (236)	00 (247)	07 (247)	12 (246)	-11 (247)	-07 (175)	16* (174)	30† (174)	17 (93)	-06 (92)	26* (92)
3 SOARS AVH		-	45† (263)	23† (263)	30† (263)	-27† (244)	-46† (248)	00 (252)	06 (236)	-08 (247)	00 (247)	-07 (246)	-07 (247)	07 (175)	41† (174)	64† (174)	52† (93)	05 (92)	67† (92)
4 SOARS MC			-	03 (263)	42† (263)	-21** (244)	-35† (248)	-16* (252)	10 (236)	07 (247)	14* (247)	19* (246)	11 (247)	-03 (175)	21** (174)	39† (174)	35** (93)	09 (92)	49† (92)
5 SOARS JSO				-	04 (263)	-09 (244)	-01 (248)	-02 (252)	04 (236)	12 (247)	-02 (247)	09 (246)	17** (247)	17* (175)	21** (174)	26† (174)	21* (93)	04 (92)	22* (92)
6 SOARS ASI					-	-12 (244)	-22** (248)	-11 (252)	09 (236)	19** (247)	17** (247)	24† (246)	06 (247)	02 (175)	05 (174)	25** (174)	17 (93)	-09 (92)	29** (92)
7 Bumby-M						-	81† (244)	01 (242)	22** (229)	09 (240)	11 (240)	11 (239)	22† (240)	-02 (171)	-40† (171)	-42† (170)	-31** (88)	-01 (87)	-22* (88)
8 Bumby-R							-	00 (246)	18** (233)	21** (243)	12 (243)	17** (242)	29† (243)	00 (173)	-34† (172)	-43† (172)	-35** (91)	07 (90)	-37† (91)
9 MSIS								-	-36† (241)	-17** (244)	-14* (244)	-28† (243)	-24† (244)	14 (178)	18* (177)	03 (177)	14 (91)	-01 (90)	-12 (91)

10 UCLA	-	31† (232)	16* (232)	31† (231)	49† (232)	- 03 (169)	- 17* (169)	- 06 (169)	- 07 (88)	- 03 (87)	11 (87)
11 AI-Physical		-	57† (247)	75† (246)	52† (247)	07 (173)	- 08 (173)	- 17* (173)	- 11 (92)	- 06 (91)	08 (91)
12 AI-Verbal			-	60† (246)	46† (247)	09 (173)	- 02 (173)	- 11 (173)	- 08 (92)	- 01 (91)	07 (91)
13 AI-Anger				-	60† (246)	04 (172)	- 07 (172)	- 14 (172)	- 08 (91)	04 (90)	15 (90)
14 AI-Host					-	07 (173)	- 09 (173)	- 19* (173)	- 04 (92)	16 (91)	23* (91)
15 CMEM 1						-	52† (177)	32† (177)	50** (30)	50** (30)	10 (30)
16 CMEM 2							-	71† (177)	66† (30)	13 (30)	22 (30)
17 CMEM 3								-	86† (31)	06 (31)	60† (31)
18 REM 1									-	47† (92)	67† (92)
19 REM 2										-	29** (91)

Note. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence. AOP = Acceptance of Offence Planning. AVH = Acceptance of Victim Harm. MC = Motivation to Change. JSO = Justifications for Sexual Offending. ASI = Acceptance of Sexual Interests. Bumby-M = Bumby Molest Scale. Bumby-R = Bumby Rape Scale. MSIS = Miller Social Intimacy Scale. UCLA = UCLA Loneliness Scale-Revised. AI = Aggression Inventory. AI-Host = Aggression Inventory – Hostility. CMEM: 1 = Child Molester Empathy Measure: Toward Children in General. CMEM: 2 = Child Molester

Empathy Measure: Toward Children who were Sexually Assaulted. CMEM: 3 = Child Molester Empathy Measure: Toward Offenders' Own Victim. REM: 1 = Rapist Empathy Measure: Toward Women in General. REM: 2 = Rapist Empathy Measure: Toward Women who were Sexually Assaulted. REM: 3 = Rapist Empathy Measure: Toward Offenders' Own Victim. Sample sizes are in parentheses

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. † $p < .001$, two-tailed.

Table 4

Zero-order and Partial Correlations between Risk Assessment Measures and Treatment Targets (Pre-Treatment Self-Report Instruments)

	Static-99	Stable	VRS	VRS F1	VRS F2	VRS F3
SOARS ASO	09	06	05	31†	- 11	- 28†
	(263)	(224)	(180)	(171)	(171)	(171)
Adjusted *r*	**-.01**	**.03**	**.03**	**.29†**	**-.13**	**-.22****
SOARS AOP	29†	19**	24**	49†	- 07	- 15
	(263)	(224)	(180)	(171)	(171)	(171)
Adjusted *r*	**.13**	**.11**	**.09**	**.40†**	**-.17***	**-.11**
SOARS AVH	05	- 01	03	21**	- 05	- 24**
	(263)	(224)	(180)	(171)	(171)	(171)
Adjusted *r*	**-.03**	**.00**	**.02**	**.21***	**-.06**	**-.20***
SOARS MC	20**	23†	32†	48†	06	- 06
	(263)	(224)	(180)	(171)	(171)	(171)
Adjusted *r*	**.12**	**.19**	**.24****	**.44†**	**-.02**	**-.02**
SOARS JSO	18**	09	14	01	17*	- 05
	(263)	(224)	(180)	(171)	(171)	(171)
SOARS ASI	21**	20**	19**	26**	07	- 09
	(263)	(224)	(180)	(171)	(171)	(171)
Adjusted *r*	**.09**	**.10**	**.06**	**.18***	**-.08**	**-.08**
Bumby-M	- 28†	- 10	- 20**	- 07	- 20*	13
	(244)	(208)	(174)	(166)	(166)	(166)
Bumby-R	- 18**	- 07	- 14	- 18*	- 06	17*
	(248)	(212)	(177)	(169)	(169)	(169)
MSIS	- 15*	- 27†	- 28†	- 21**	- 18*	- 03
	(260)	(218)	(178)	(170)	(170)	(170)
Adjusted *r*	**-.19**	**-.07**	**-.24**	**-.25**	**-.10**	**-.15**
UCLA	- 01	24**	14	13	12	09
	(243)	(207)	(179)	(170)	(170)	(170)
Adjusted *r*	**.25**	**.30***	**.32***	**.27**	**.25**	**.28**
AI-Physical	30†	34†	36†	09	42†	20**
	(247)	(211)	(175)	(167)	(167)	(167)
Adjusted *r*	**-.02**	**.16**	**-.01**	**-.14**	**.14**	**-.06**
AI-Verbal	16*	10	14	06	14	04
	(247)	(211)	(175)	(167)	(167)	(167)
Adjusted *r*	**-.06**	**.04**	**-.03**	**.02**	**-.06**	**-.11**
AI-Anger	22**	30†	27†	14	28†	12
	(246)	(210)	(174)	(166)	(166)	(166)
Adjusted *r*	**-.20**	**.20**	**-.02**	**-.07**	**.04**	**.06**
AI-Host	03	26†	14	09	16*	16*
	(247)	(211)	(175)	(167)	(167)	(167)
Adjusted *r*	**-.19**	**.14**	**-.02**	**-.08**	**.03**	**.10**
CMEM 1	03	- 19*	08	15	06	- 15
	(179)	(149)	(123)	(118)	(118)	(118)
CMEM 2	15*	- 16	01	14	- 03	- 41†
	(178)	(148)	(123)	(118)	(118)	(118)

CMEM: 3	.16* (178)	-.09 (148)	.06 (123)	.25** (118)	-.06 (118)	-.36† (118)
REM: 1	.03 (93)	-.11 (78)	.03 (68)	.25* (64)	-.14 (64)	-.20 (64)
REM: 2	-.21* (92)	-.10 (77)	-.10 (67)	.08 (.63)	-.23 (63)	-.07 (63)
REM: 3	.19 (92)	.12 (77)	.19 (67)	.32* (64)	.06 (64)	-.06 (64)
Adjusted *r*	**-.05**	**.03**	**.02**	**.09**	**-.05**	**.01**

Note. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence. AOP = Acceptance of Offence Planning. AVH = Acceptance of Victim Harm. MC = Motivation to Change. JSO = Justifications for Sexual Offending. ASI = Acceptance of Sexual Interests. Bumby-M = Bumby Molest Scale. Bumby-R = Bumby Rape Scale. MSIS = Miller Social Intimacy Scale. UCLA = UCLA Loneliness Scale-Revised. AI = Aggression Inventory. AI-Host = Aggression Inventory – Hostility. CMEM: 1 = Child Molester Empathy Measure: Toward Children in General. CMEM: 2 = Child Molester Empathy Measure: Toward Children who were Sexually Assaulted. CMEM: 3 = Child Molester Empathy Measure: Toward Offenders' Own Victim. REM: 1 = Rapist Empathy Measure: Toward Women in General. REM: 2 = Rapist Empathy Measure: Toward Women who were Sexually Assaulted. REM: 3 = Rapist Empathy Measure: Toward Offenders' Own Victim. VRS = Violence Risk Scale: Sex Offender Version: Total Score. VRS: F1 = Violence Risk Scale: Sex Offender Version: Factor 1. VRS: F2 = Violence Risk Scale: Sex Offender Version: Factor 2. VRS: F3 = Violence Risk Scale: Sex Offender Version: Factor 3. Sample sizes are in parentheses

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. † $p < .001$, two-tailed.

Table 5
Description of Participants in Relation to Offence Pathway

Variable	Av-Pass	Av-Act	App-Aut	App-Exp	*df*	*F or* X^2	*p*	ω^2 *or Cramer's V*
	M(SD) *N*	*M*(SD) *N*	*M*(SD) *N*	*M*(SD) *N*				
Age	42.19±13.65 $(54)_a$	44.84±11.32 $(45)_b$	35.20±10.65 $(75)_{a, b, c}$	41.26±13.87 $(101)_c$	3, 271	6.62	< .001	.06
Education	10.84±1.41 (38)	10.96±2.55 (28)	10.09±1.83 (64)	10.33±2.21 (75)	3, 201	1.82	.144	.01
Marital Status (ever married)	90.7% (49)	84.4% (38)	64.0% (48)	71.7% (71)	3	14.84	.002	.23
Adj. Std. Residual	*2.9*	*1.5*	*-2.7*	*-1.1*				
Length of Sentence (in years)	3.37±1.28 $(53)_a$	3.66±1.86 $(44)_b$	4.37±3.33 (63)	5.46±3.93 $(75)_{a, b}$	3, 120.6	6.96	< .001	.06
Number of Victims (Index)	1.37±0.62 $(54)_a$	1.47±0.66 $(45)_b$	1.34±0.96 $(73)_c$	2.27±2.32 $(99)_{a, b, c}$	3, 143.1	5.18	.002	.07
Number of Victims (overall)	1.54±0.93 $(54)_a$	1.69±0.82 $(45)_b$	2.09±2.01 $(75)_c$	3.34±2.73 $(101)_{a, b, c}$	3, 147.6	12.81	< .001	.11

Violence of the Offence	0.26±0.92 (54) $_{a, b}$	0.16±0.60 (45) $_{c, d}$	2.15±2.48 (75) $_{a, c}$	2.20±2.69 (101) $_{b, d}$	3, 147.8	30.08	< .001	.16
Sexual Intrusiveness	3.74±0.52 (54)	3.51±0.59 (45)	3.81±0.65 (75)	3.87±0.66 (101)	3, 271	3.67	.013	.03
Gender of Victim (Child Molesters only)					3	15.05	.002	.31
Any Male Victim	8.2% (4)	15.4% (6)	15.8% (3)	37.7% (20)				
Adj. Std. Residual	*-2.6*	*-.09*	*-.06*	*3.8*				
Female Victim Only	91.8% (45)	84.6% (33)	84.2% (16)	62.3% (33)				
Adj. Std. Residual	*2.6*	*0.9*	*.06*	-3.8				
Prior Charges/Convictions	0.09±0.35 (54) $_{a, b}$	0.27±0.75 (45) $_{c}$	0.81±1.30± (75) $_{a}$	1.34±1.99 (101) $_{b, c}$	3, 128.5	18.07	< .001	.10
Sexual								
Violent	0.31±0.75 (54) $_{a, b}$	0.44±0.94 (45) $_{c, d}$	2.00±2.38 (75) $_{a, c}$	2.37±2.81 (101) $_{b, d}$	3, 142.1	24.85	< .001	.14
Criminal	2.35±4.67 (54) $_{a, b}$	3.44±8.33 (45) $_{c, d}$	9.49±9.81 (75) $_{a, c}$	7.86±9.35 (101) $_{b, d}$	3, 132.2	14.52	< .001	.09

Note. Av-Pass = Avoidant-Passive. Av-Act = Avoidant-Active. App-Aut = Approach-Automatic. App-Exp = Approach-Explicit. *Adj. Std. Residual* = Adjusted Standardized Residual. ω^2 = Omega Squared (effect size).
Means in the same row that share subscript are significantly different according to Tukey's honestly significant difference (HSD) post-hoc test.

Table 6
Relationship between Offence Pathway and Type of Sexual Offender

Variable	Av-Pass	Av-Act	App-Aut	App-Exp			
	% (N)	*% (N)*	*% (N)*	*% (N)*	X^2	*p*	*Cramer's V*
					123.4	< .001	.39
Rapist	3.5% (3)	0% (0)	57.6% (49)	38.8% (33)			
Adj. Std. Residual	*-4.5*	*-4.9*	*7.6*	*0.5*			
Extra-familial Child Molester	8.3% (5)	20.0% (12)	21.7% (13)	50.0% (29)			
Adj. Std. Residual	*-2.5*	*0.9*	*-1.1*	*2.4*			
Intra-familial Child Molester	43.6% (44)	26.7% (27)	5.9% (6)	23.8% (24)			
Adj. Std. Residual	*7.6*	*3.5*	*-6.1*	*-3.4*			
Mixed	6.9% (2)	20.7% (6)	24.1% (7)	48.3% (14)			
Adj. Std. Residual	*-1.8*	*0.7*	*-0.4*	*1.4*			

Note. Av-Pass = Avoidant-Passive. Av-Act = Avoidant-Active. App-Aut = Approach-Automatic. App-Exp = Approach-Explicit.
Adj. Std. Residual = Adjusted Standardized Residual.
Percentages reported are within type of sexual offender.

Table 7
Group Differences (ANOVAs) on Static and Pre-Treatment Dynamic Risk Assessment Measures

	Av-Pass	Av-Act	App-Aut	App-Exp				
Variable	*M*(SD) *N*	*M*(SD) *N*	*M*(SD) *N*	*M*(SD) *N*	*df*	*F*	*p*	ω^2
Static-99	1.19±1.43 $(54)_{a, b}$	1.53±1.42 $(45)_{c, d}$	4.33±1.94 $(75)_{a, c}$	4.38±2.32 $(101)_{b, d}$	3, 138.6	64.98	< .001	.36
Stable 2000	5.59±1.96 $(46)_{a}$	5.38±2.58 $(39)_{b}$	6.48±2.10 (65)	7.23±2.09 $(79)_{a, b}$	3, 225	8.92	< .001	.09
VRS: Total Score	20.81±7.98 $(34)_{a, b}$	21.35±8.51 $(34)_{c}$	26.33±9.83 $(46)_{a}$	30.10±9.52 $(69)_{b, c}$	3, 179	11.16	< .001	.14
VRS:F1	7.58±3.67 $(33)_{a}$	8.21±4.13 $(34)_{b}$	4.91±4.09 $(44)_{a, b, c}$	9.59±3.85 $(63)_{c}$	3, 170	12.41	< .001	.16
VRS:F2	5.36±4.23 $(33)_{a, b}$	4.85±3.69 $(34)_{c, d}$	10.30±4.42 $(44)_{a, c}$	8.87±5.12 $(63)_{b, d}$	3, 170	13.62	< .001	.18
VRS:F3	4.79±1.65 (33)	4.71±1.87 (34)	4.86±1.94 (44)	4.98±2.00 (63)	3, 170	.181	.909	.01

Note. Av-Pass = Avoidant-Passive; Av-Act = Avoidant-Active; App-Aut = Approach-Automatic; App-Exp = Approach-Explicit. VRS:F1 = Violence Risk Scale: Sex Offender Version: Factor 1. VRS:F2 = Violence Risk Scale: Sex Offender Version: Factor 2.

VRS:F3 = Violence Risk Scale: Sex Offender Version: Factor 3. VRS: Total Score = Violence Risk Scale: Sex Offender Version: Total Pre-treatment score. ω^2= omega squared (effect size).
Means in the same row that share subscript are significantly different according to Tukey`s honestly significant difference (HSD) test.

Table 8
Group Differences (ANOVAs) on Self-Reported Treatment Targets Assessed at Pre-Treatment

	Av-Pass	Av-Act	App-Aut	App-Exp				
Variable	*M*(SD) *N*	*M*(SD) *N*	*M*(SD) *N*	*M*(SD) *N*	*df*	F^a	*p*	ω^2
SOARS ASO	26.33±5.85 (51) $_a$	27.45±5.23 (44) $_b$	22.79±7.51 (70) $_{a, b, c}$	26.37±6.15 (98) $_c$	3, 125.47	5.52	< .001	.06
SOARS AOP	9.14±7.58 (51) $_a$	12.45±9.04 (44)	8.07±8.27 (70) $_b$	14.76±9.90 (98) $_{a, b}$	3, 125.13	8.93	< .001	.09
SOARS AVH	28.41±4.61 (51) $_a$	26.61±4.71 (44)	24.07±8.62 (70) $_a$	26.68±6.89 (98)	3, 131.75	4.39	.006	.04
SOARS MC	19.27±6.20 (51)	20.50±6.86 (44) $_a$	16.80±7.04 (70) $_{a, b}$	20.11±7.15 (98) $_b$	3, 259	3.91	.009	.03
SOARS JSO	7.27±4.07 (51)	5.20±3.68 (44) $_a$	8.06±5.23 (70) $_a$	7.06±4.80 (98)	3, 259	3.48	.016	.03
SOARS ASI	18.39±6.17 (51)	20.41±6.19 (44)	17.83±7.94 (70)	19.93±7.93 (98)	3, 128.35	1.80	.150	.01
Bumby-M	65.82±16.69 (50) $_a$	66.15±17.01 (41) $_b$	56.35±16.15 (65) $_{a, b}$	61.68±18.71 (88)	3, 240	3.89	.010	.03
Bumby-R	60.25±15.60 (51)	59.94±13.87 (41)	61.29±18.89 (67)	57.26±15.89 (89)	3, 244	0.86	.462	.00
MSIS	137.21±21.32 (51)	133.17±21.83 (42)	135.26±26.01 (73)	131.98±27.56 (94)	3, 256	.554	.646	.01
UCLA	42.81±10.61 (45)	43.74±11.38 (40)	41.20±8.27 (66)	41.42±11.06 (92)	3, 108.25	0.66	.576	.00

AI-Physical	17.31±7.43 (49) $_{a}$	16.90±4.81 (42) $_{b}$	20.96±7.42 (67) $_{a, b}$	18.84±7.06 (89)	3, 243	3.98	.009	.03
AI-Verbal	12.73±3.99 (49)	12.93±3.54 (42)	13.30±4.01 (67)	13.16±4.28 (89)	3, 243	0.22	.885	.00
AI-Anger	14.94±5.43 (49)	13.31±3.92 (42)	15.87±6.03 (67)	14.51±5.09 (88)	3, 120.48	2.52	.062	.01
AI-Hostility	20.20±6.99 (49)	18.43±6.67 (42)	21.84±7.70 (67) $_{a}$	18.72±6.24 (89) $_{a}$	3, 243	3.30	.021	.03
CMEM: 1	328.61±46.08 (47)	319.29±55.10 (39)	334.04±47.95 (28)	311.06±58.32 (65)	3, 175	1.66	.178	.01
CMEM: 2	385.00±57.97 (46)	364.83±71.58 (39)	369.99±96.89 (28)	370.63±62.28 (65)	3, 174	0.67	.569	.00
CMEM: 3	375.10±77.25 (46)	355.97±86.44 (39)	336.33±107.68 (28)	365.95±74.29 (65)	3, 174	1.37	.255	.01

Note. Av-Pass = Avoidant-Passive. Av-Act = Avoidant-Active. App-Aut = Approach-Automatic. App-Exp = Approach-Explicit. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence. AOP = Acceptance of Offence Planning. AVH = Acceptance of Victim Harm. MC = Motivation to Change. JSO = Justifications for Sexual Offending. ASI = Acceptance of Sexual Interests. Bumby-M = Bumby Molest Scale. Bumby-R = Bumby Rape Scale. MSIS = Miller Social Intimacy Scale. UCLA = UCLA Loneliness Scale-Revised. AI = Aggression Inventory. CMEM: 1 = Child Molester Empathy Measure: Toward Children in General. CMEM: 2 = Child Molester Empathy Measure: Toward Children who were Sexually Assaulted. CMEM: 3 = Child Molester Empathy Measure: Toward Offenders' Own Victim. ω^2 = *Omega squared* (effect size).
[a]Although the majority of the *F* tests did not reach the critical cut-off for statistical significance ($p < .001$), pairwise comparisons were conducted and shown for all variables. Although this approach is not conventional, see Howell (2002) and Wilcox (1987) for cogent arguments on why this is appropriate.
Means in the same row that share subscript are significantly different according to Tukey's honestly significant difference (HSD) test.

Table 9

Estimated Marginal Means for Self-Reported Treatment Targets (Pre-Treatment) with BIDR as a Covariate

	Av-Pass	Av-Act	App-Aut	App-Exp				
Variable	EMM (SE)	EMM (SE)	EMM (SE)	EMM (SE)	*df*	F^a	*p*	ω^2
SOARS ASO	26.37±0.86 (51) $_a$	27.11±0.94 (43) $_b$	22.50±0.78 (62) $_{a, b, c}$	26.53±0.67 (84) $_c$	3, 235	7.03	< .001	.07
SOARS AOP	9.19±1.14 (51) $_a$	11.70±1.25 (43) $_b$	6.79±1.04 (62) $_{b, c}$	13.97±0.89 (84) $_{a, c}$	3, 235	10.05	< .001	.09
SOARS AVH	28.45±0.91 (51) $_a$	26.28±0.99 (43)	23.76±0.83 (62) $_a$	26.53±0.71 (84)	3, 235	5.01	.002	.05
SOARS MC	19.34±0.90 (51)	19.81±0.98 (43)	16.61±0.82 (62) $_a$	19.97±0.70 (84) $_a$	3, 235	3.75	.012	.03
SOARS ASI	18.45±0.94 (51)	19.82±1.03 (43)	16.97±0.85 (62)	19.29±0.73 (84)	3, 235	1.98	.117	.01
MSIS	137.71±3.06 (50)	134.25±3.35 (42)	140.60±2.78 (61)	133.74±2.38 (83)	3, 231	1.37	.251	.00
UCLA	42.76±1.48 (44)	43.09±1.56 (40)	40.81±1.30 (57)	41.18±1.08 (83)	3, 219	0.66	.575	.00
AI-Physical	17.18±0.89 (49) $_a$	16.50±0.97 (42) $_b$	20.69±0.80 (61) $_{a, b}$	18.55±0.69 (82)	3, 229	4.61	.004	.04
AI-Verbal	12.69±0.56 (49)	12.79±0.61 (42)	13.35±0.50 (61)	13.18±0.43 (82)	3, 229	0.34	.795	.00
AI-Anger	14.83±0.68 (49)	12.98±0.73 (42) $_a$	15.70±0.61 (61) $_a$	14.20±0.53 (81)	3, 228	2.92	.035	.02

AI-Hostility	20.08±0.90 (49)	18.02±0.97 $(42)_{a}$	21.77±0.81 $(61)_{a, b}$	18.76±0.70 $(82)_{b}$	3, 229	3.85	.010	.03

Note. Av-Pass = Avoidant-Passive. Av-Act = Avoidant-Active. App-Aut = Approach-Automatic. App-Exp = Approach-Explicit. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence. AOP = Acceptance of Offence Planning. AVH = Acceptance of Victim Harm. MC = Motivation to Change. JSO = Justifications for Sexual Offending. ASI = Acceptance of Sexual Interests. UCLA = UCLA Loneliness Scale-Revised. AI = Aggression Inventory. EMM = Estimated Marginal Means. ω^2 = Omega squared (effect size).

Means in the same row that share subscript are significantly different according to Tukey's honestly significant difference (HSD) test.

[a]Although the majority of the *F* tests did not reach the critical cut-off for statistical significance ($p < .001$), pairwise comparisons were conducted and shown for all variables. Although this approach is not conventional, see Howell (2002) and Wilcox (1987) for cogent arguments on why this is appropriate.

Table 10

Polytomous Logistic Regression Analysis Predicting Pathways to Sexual Offending (full model)

	Avoidant-Passive				Avoidant-Active				Approach-Automatic			
Predictor	β	SE β	e^{β} (odds ratio)	95% CI for Odds Ratio	β	SE β	e^{β} (odds ratio)	95% CI for Odds Ratio	β	SE β	e^{β} (odds ratio)	95% C for Odd Ratio
Static-99	-1.44*	.30	.24	.13 - .42	-.82*	.23	.44	.28 - .69	.01	.19	1.01	.70 - 1.4
Stable 2000	-.23	.18	.80	.56 - 1.14	-.21	.17	.81	.59 - 1.12	-.09	.17	.92	.66 - 1.2
VRS: Total Score	.20	.16	1.22	.89 - 1.68	.18	.15	1.20	.90 - 1.60	.01	.14	1.01	.77 - 1.3
VRS:F1	-.24	.20	.78	.53 - 1.16	-.21	.18	.81	.57 - 1.15	-.29	.18	.75	.53 - 1.0
VRS:F2	-.11	.22	.89	.58 - 1.37	-.26	.20	.77	.52 - 1.14	.12	.19	1.13	.78 - 1.6
SOARS												
ASO	.05	.06	1.05	.94 - 1.17	.06	.05	1.06	.95 - 1.18	-.08	.05	.93	.85 - 1.0
AOP	.04	.04	1.04	.96 - 1.13	.05	.04	1.05	.98 - 1.13	.02	.04	1.02	.94 - 1.0

Note. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence. AOP = Acceptance of Offence Planning.

Approach-Explicit is the referent group.

Nagelkerke R squared = .62.

* $p < .001$, two-tailed.

Table 11

Polytomous Logistic Regression Analysis Predicting Pathways to Sexual Offending (parsimonious model)

	Avoidant-Passive				Avoidant-Active				Approach-Automatic			
Predictor	β	SE β	e^{β} (odds ratio)	95% CI for Odds Ratio	β	SE β	e^{β} (odds ratio)	95% CI for Odds Ratio	β	SE β	e^{β} (odds ratio)	95% C for Odd Ratio
Static-99	-.99*	.14	.37	.28 - .49	-.81*	.13	.44	.34 - .57	.06	.08	1.06	.91 - 1.2
SOARS												
ASO	.06	.04	1.06	.99 - 1.14	.09	.04	1.10	1.01 - 1.18	-.08*	.03	.92	.87 - .9

Note. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence.
Approach-explicit is the referent group.
Nagelkerke R squared = .47.
* $p < .001$, two-tailed.

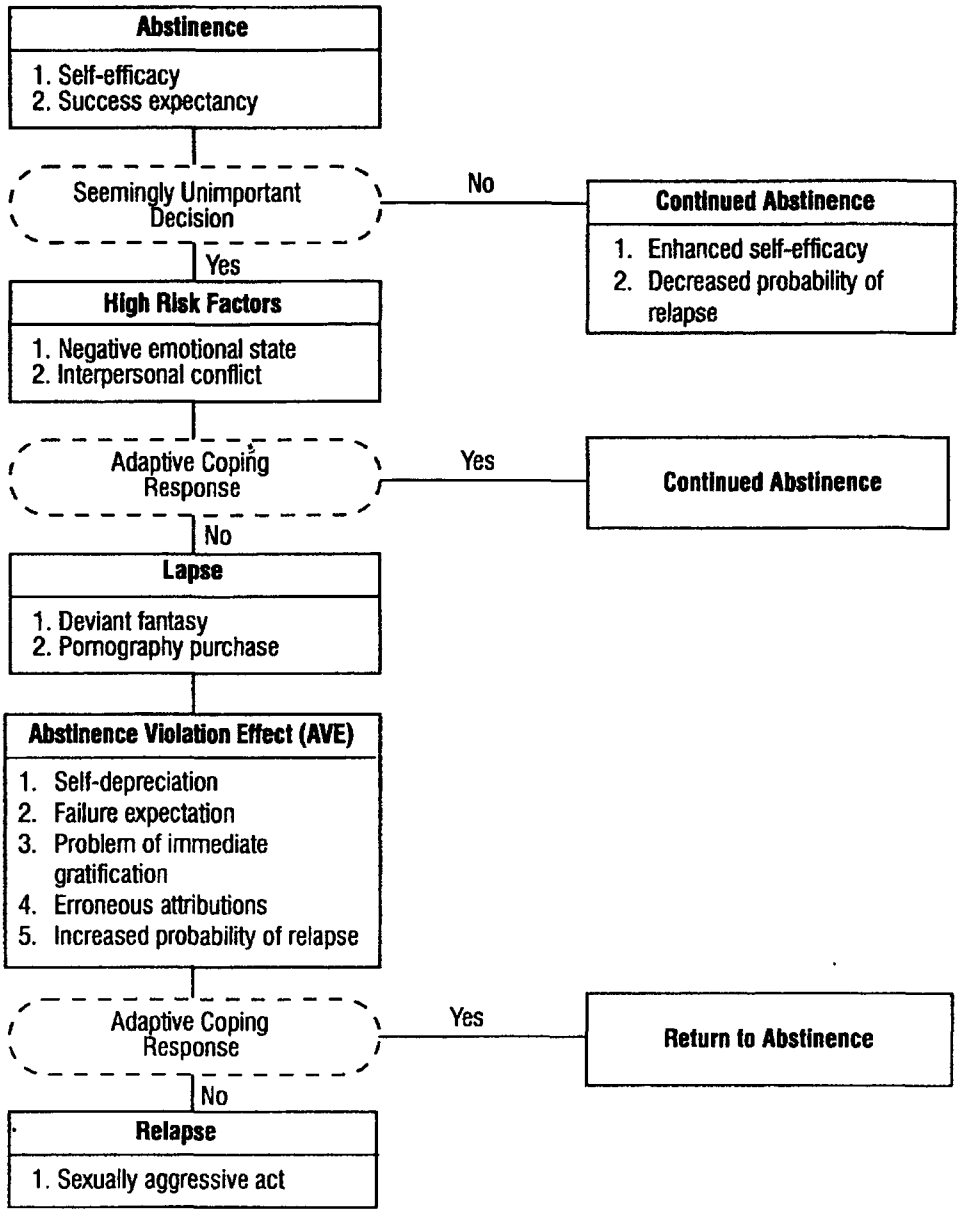

Figure 1. The Relapse Prevention Model Adapted for Sexual Offending.

Laws, D. R., & Ward, T. Edited by W. L. Marshall, Y. M. Fernandez, L. E. Marshall, & G. A. Serran (2006). Copyright John Wiley and Sons Limited. Reproduced with permission.

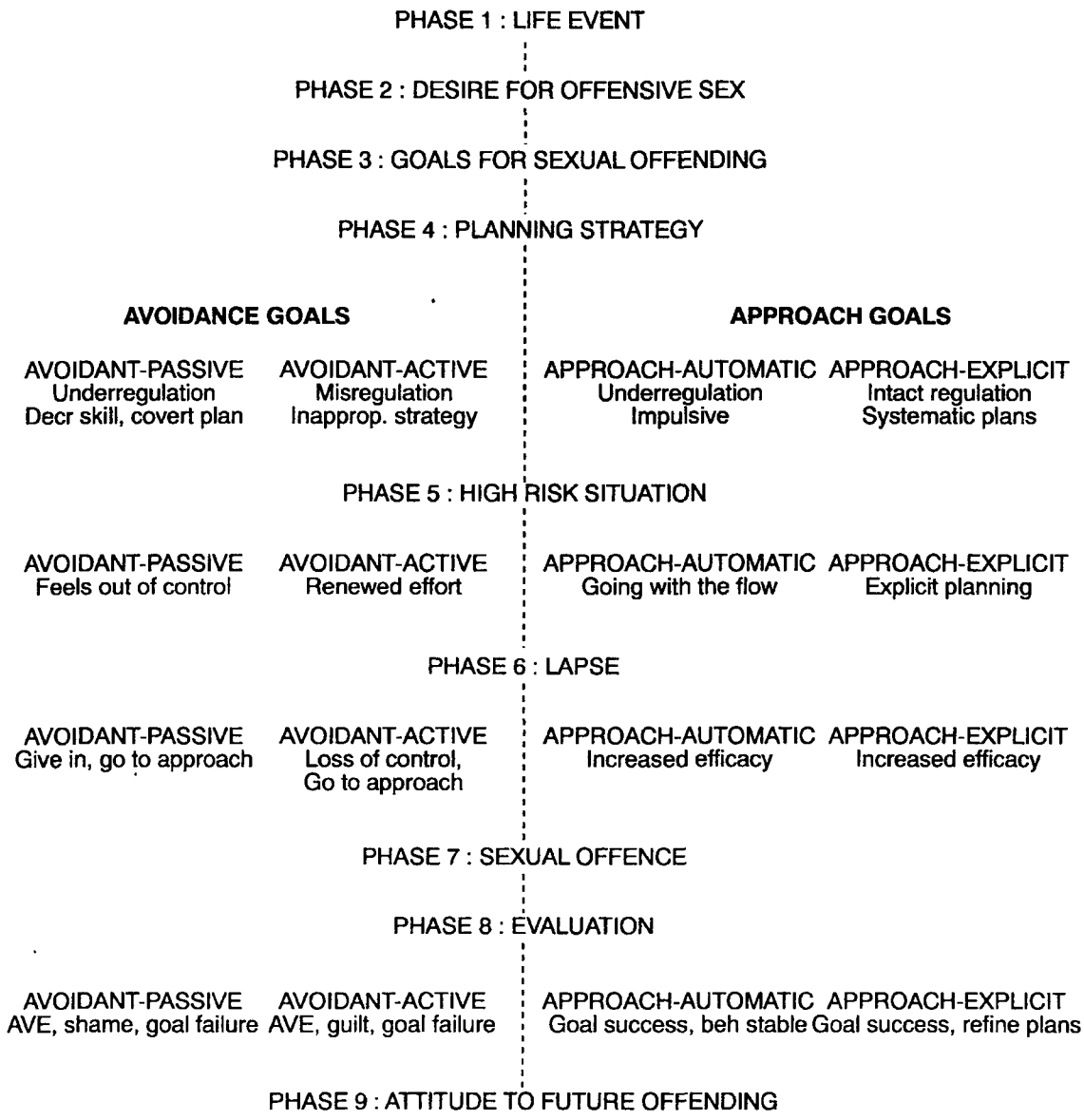

Figure 2. The Self-Regulation Model of Sexual Offending.
Laws, D. R., & Ward, T. Edited by W. L. Marshall, Y. M. Fernandez, L. E. Marshall, & G. A. Serran (2006). Copyright John Wiley and Sons Limited. Reproduced with permission.

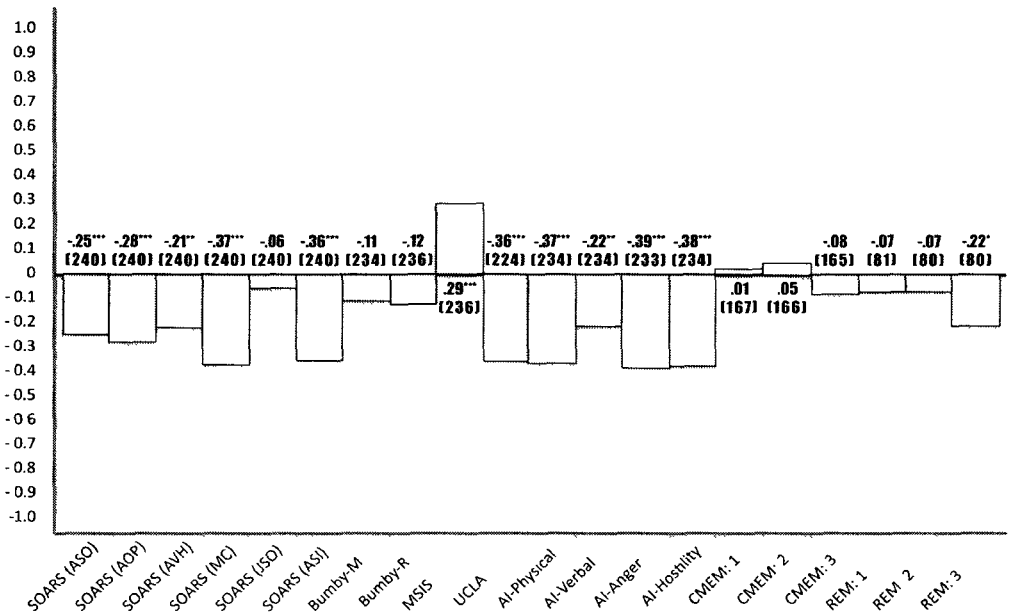

Figure 3. Correlations between Social Desirable Responding and Self-Reported Treatment Targets

Note. SOARS = Sex Offender Acceptance and Responsibility Scales. ASO = Acceptance of Sexual Offence. AOP = Acceptance of Offence Planning. AVH = Acceptance of Victim Harm. MC = Motivation to Change. JSO = Justifications for Sexual Offending. ASI = Acceptance of Sexual Interests. Bumby-M = Bumby Molest Scale. Bumby-R = Bumby Rape Scale. MSIS = Miller Social Intimacy Scale. UCLA = UCLA Loneliness Scale-Revised. AI = Aggression Inventory. CMEM: 1 = Child Molester Empathy Measure: Toward Children in General. CMEM: 2 = Child Molester Empathy Measure: Toward Children who were Sexually Assaulted. CMEM: 3 = Child Molester Empathy Measure: Toward Offenders' Own Victim. REM: 1 = Rapist Empathy Measure: Toward Women in General. REM: 2 = Rapist Empathy Measure: Toward Women who were Sexually Assaulted. REM: 3 = Rapist Empathy Measure: Toward Offenders' Own Victim. Sample sizes are in parentheses.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

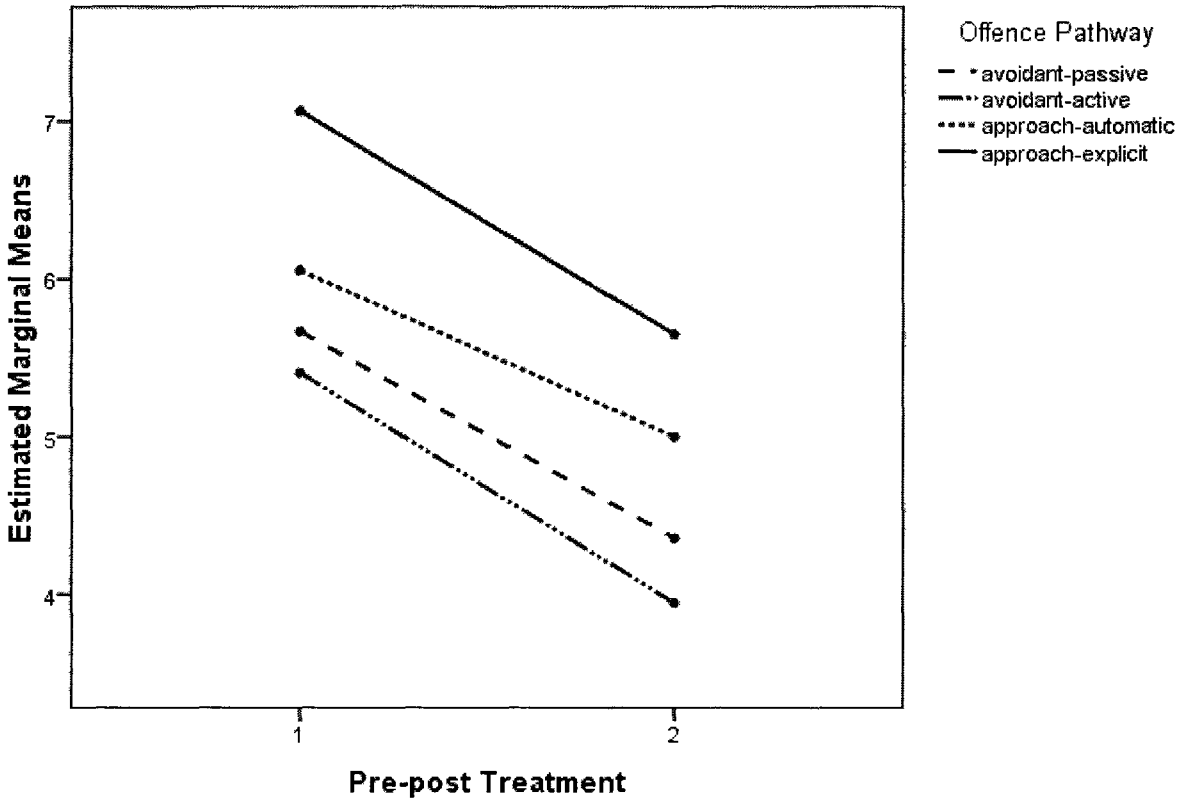

Figure 4. Pre-Post Treatment Change on STABLE, as a function of Offence Pathway.

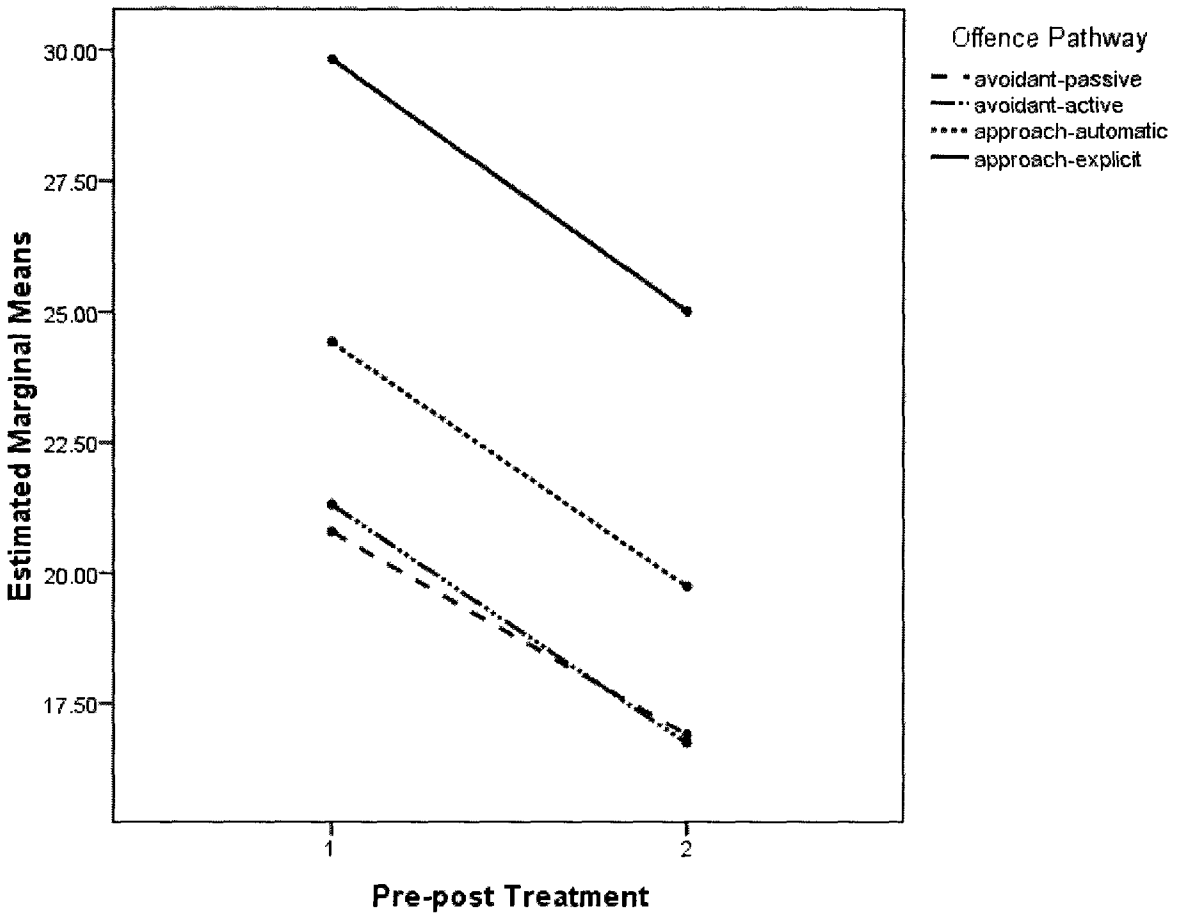

Figure 5. Pre-Post Treatment Change on VRS: Total Score, as a function of Offence Pathway.

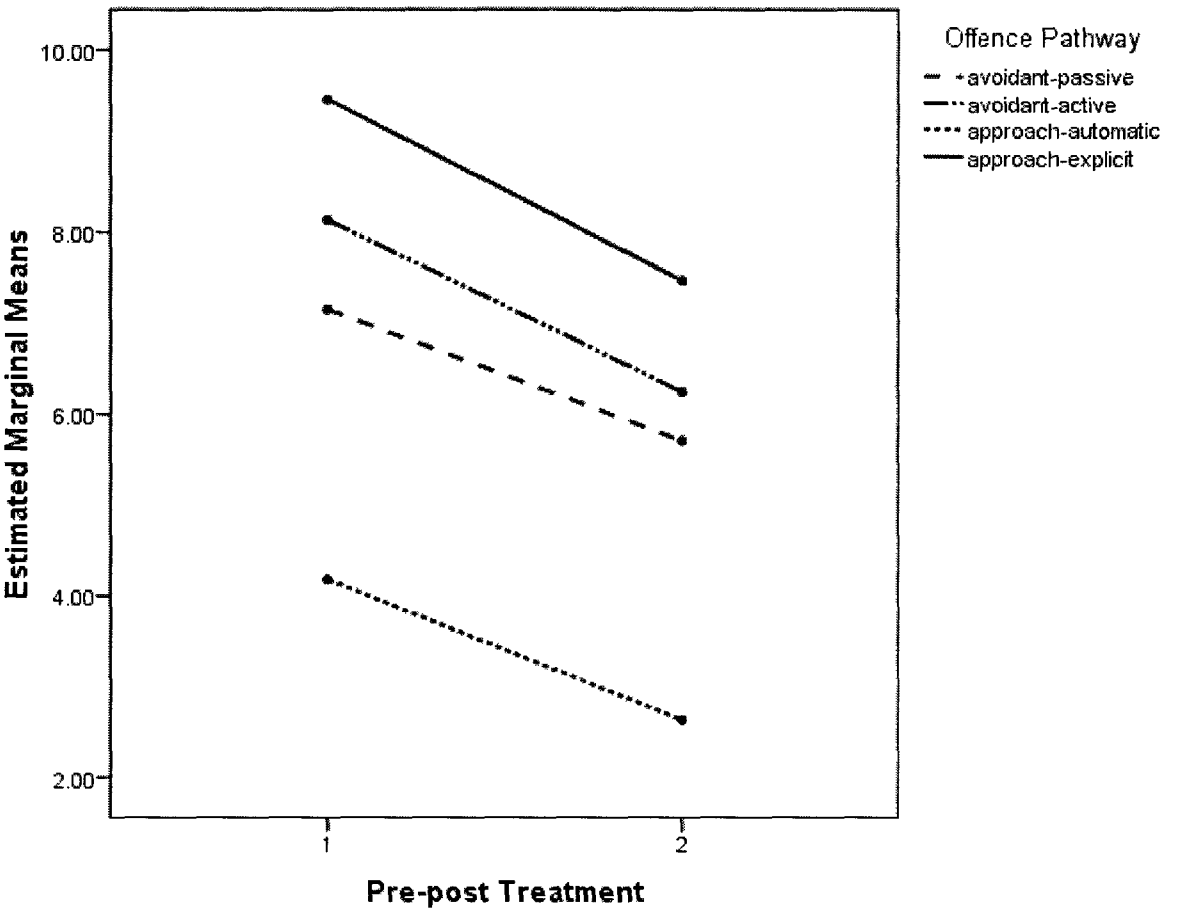

Figure 6. Pre-Post Treatment Change on VRS: F1, as a function of Offence Pathway.

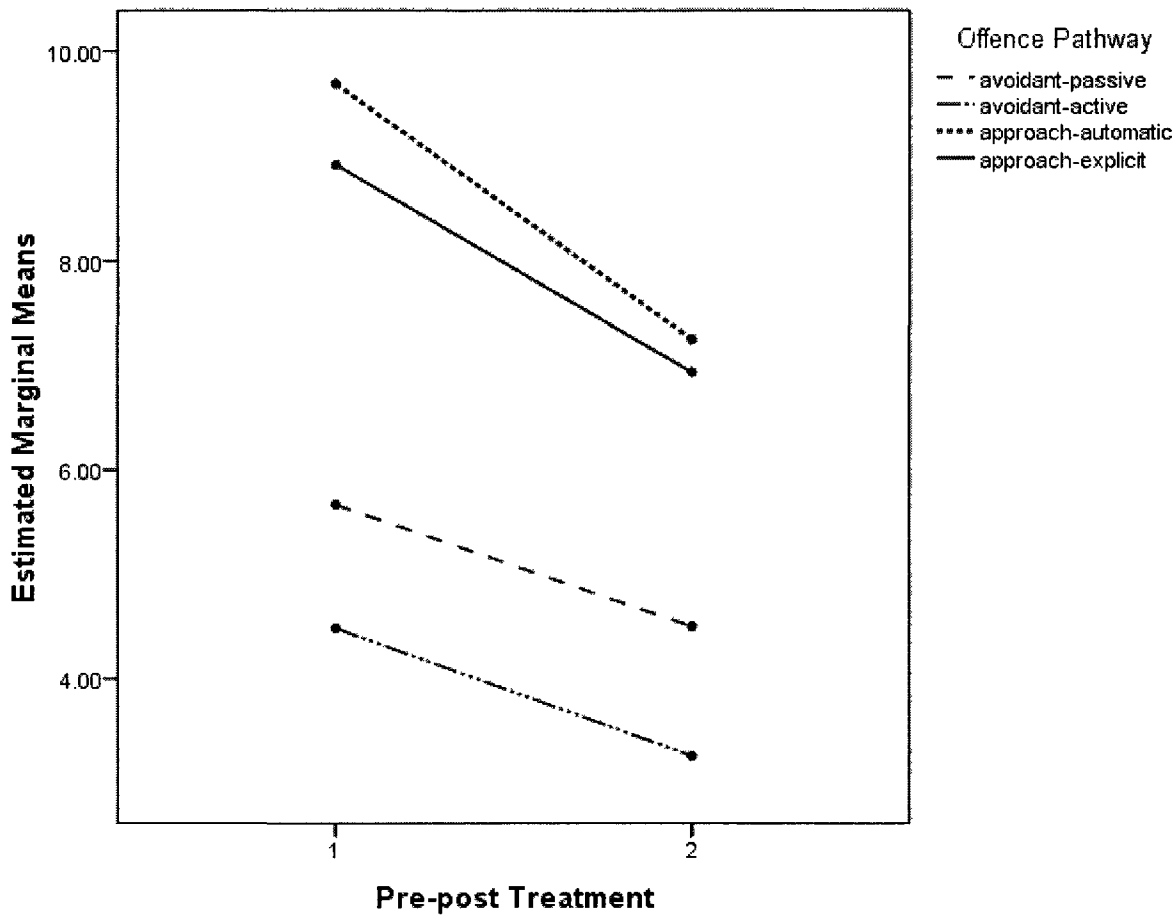

Figure 7. Pre-Post Treatment Change on VRS: F2, as a function of Offence Pathway.

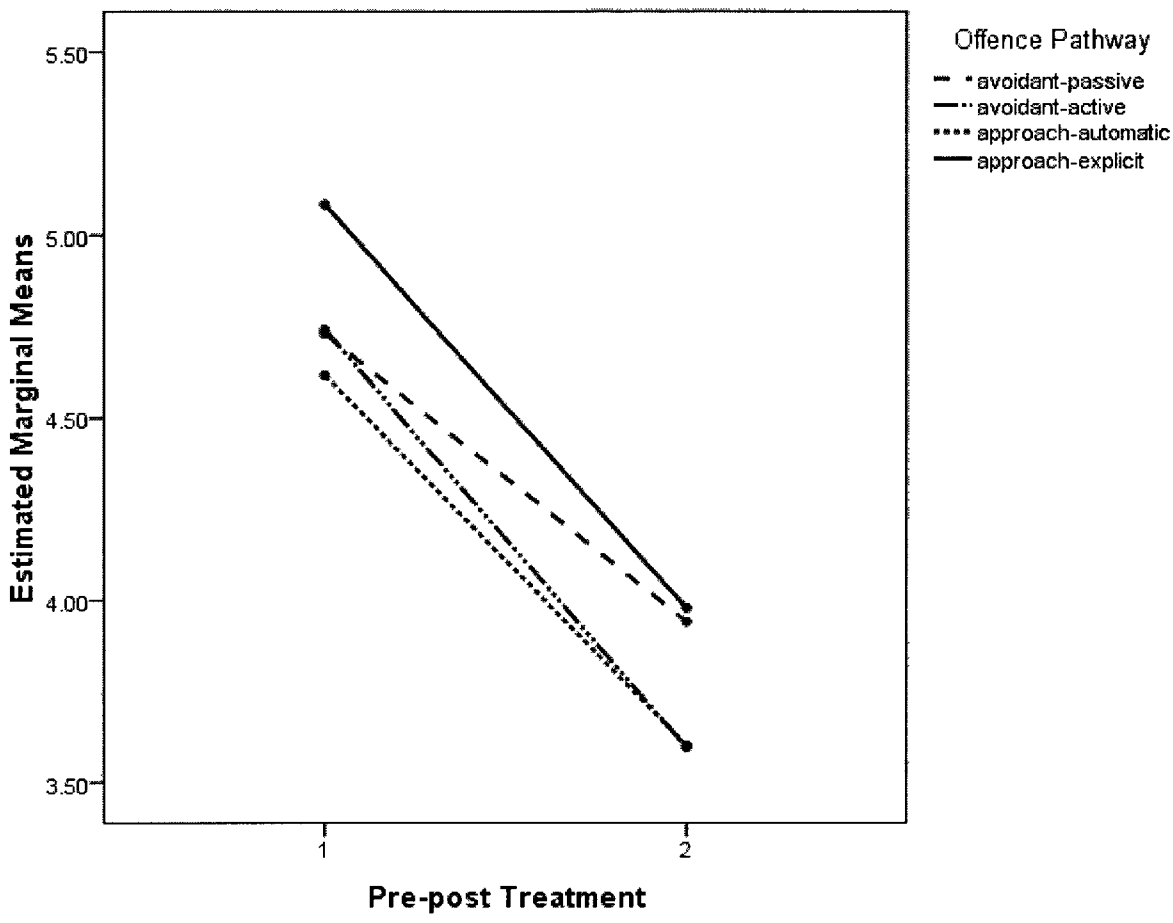

Figure 8. Pre-Post Treatment Change on VRS: F3, as a function of Offence Pathway.

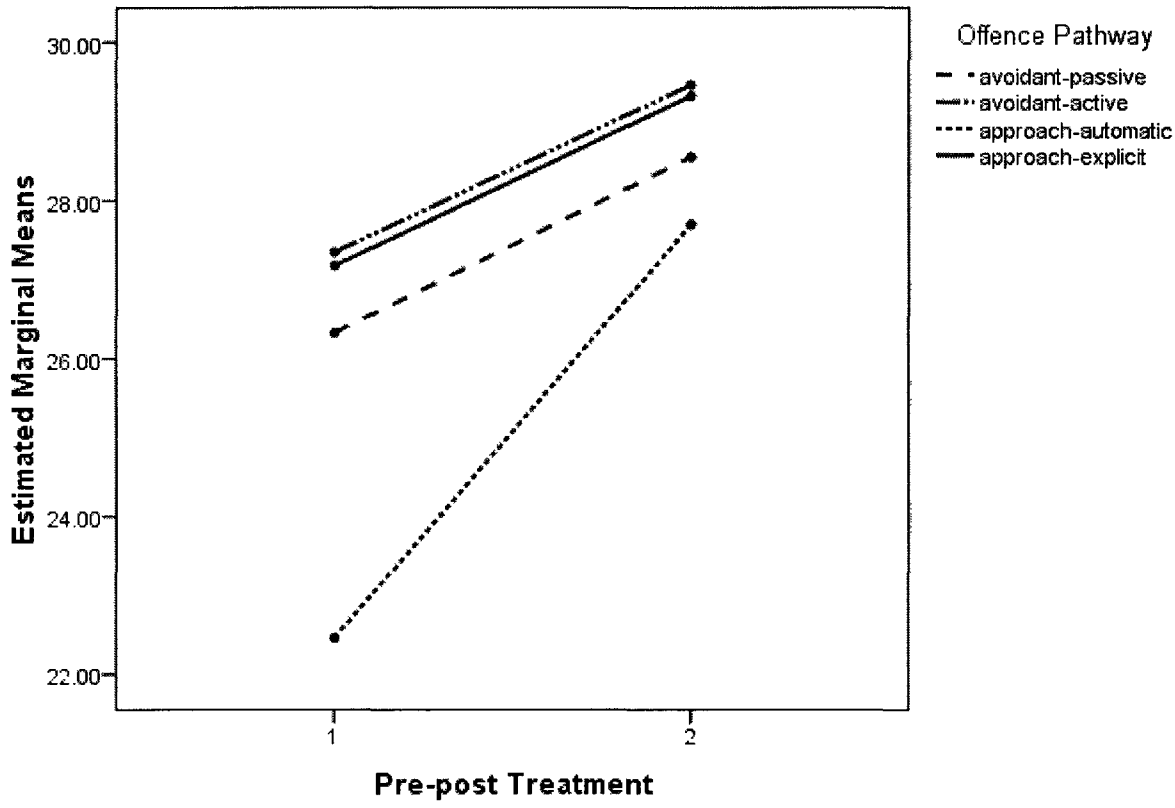

Figure 9. Pre-Post Treatment Change on SOARS (ASO), as a function of Offence Pathway.

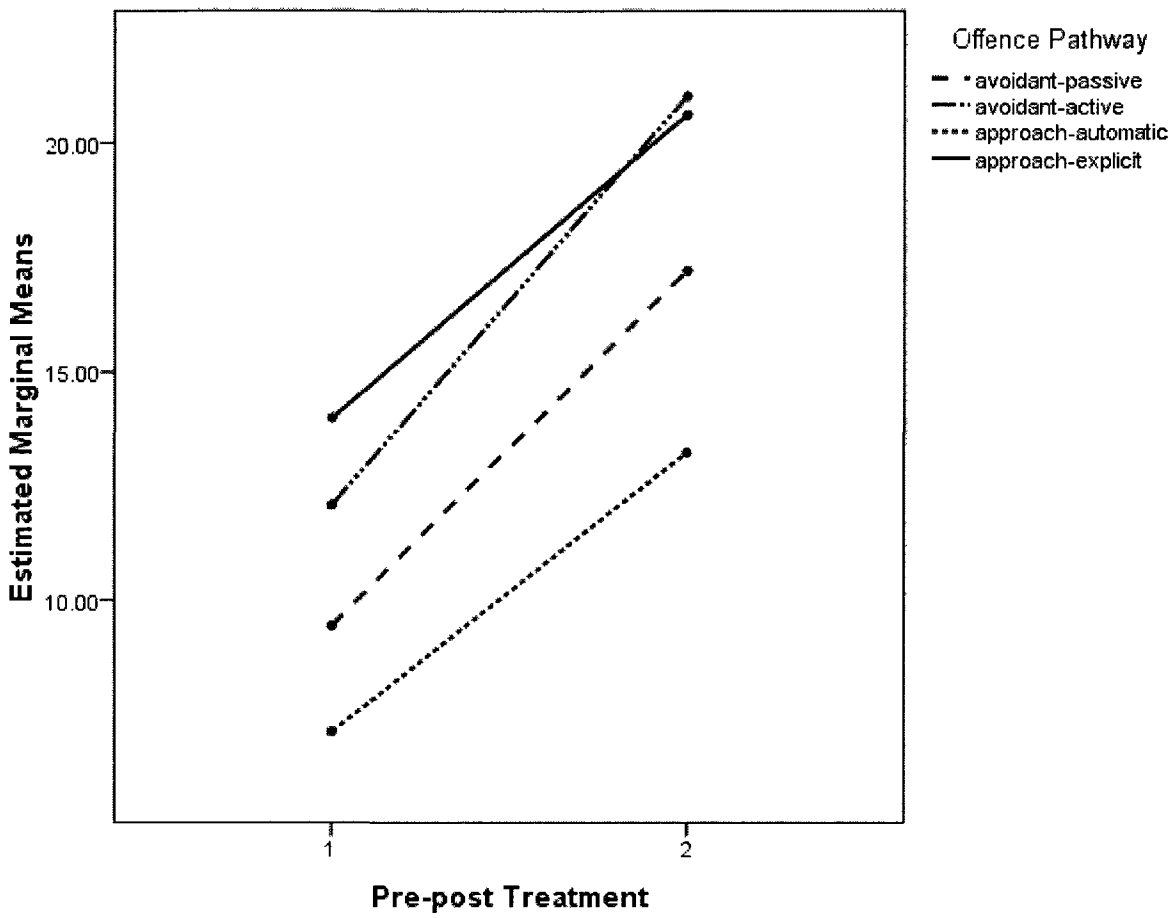

Figure 10. Pre-Post Treatment Change on SOARS (AOP), as a function of Offence Pathway.

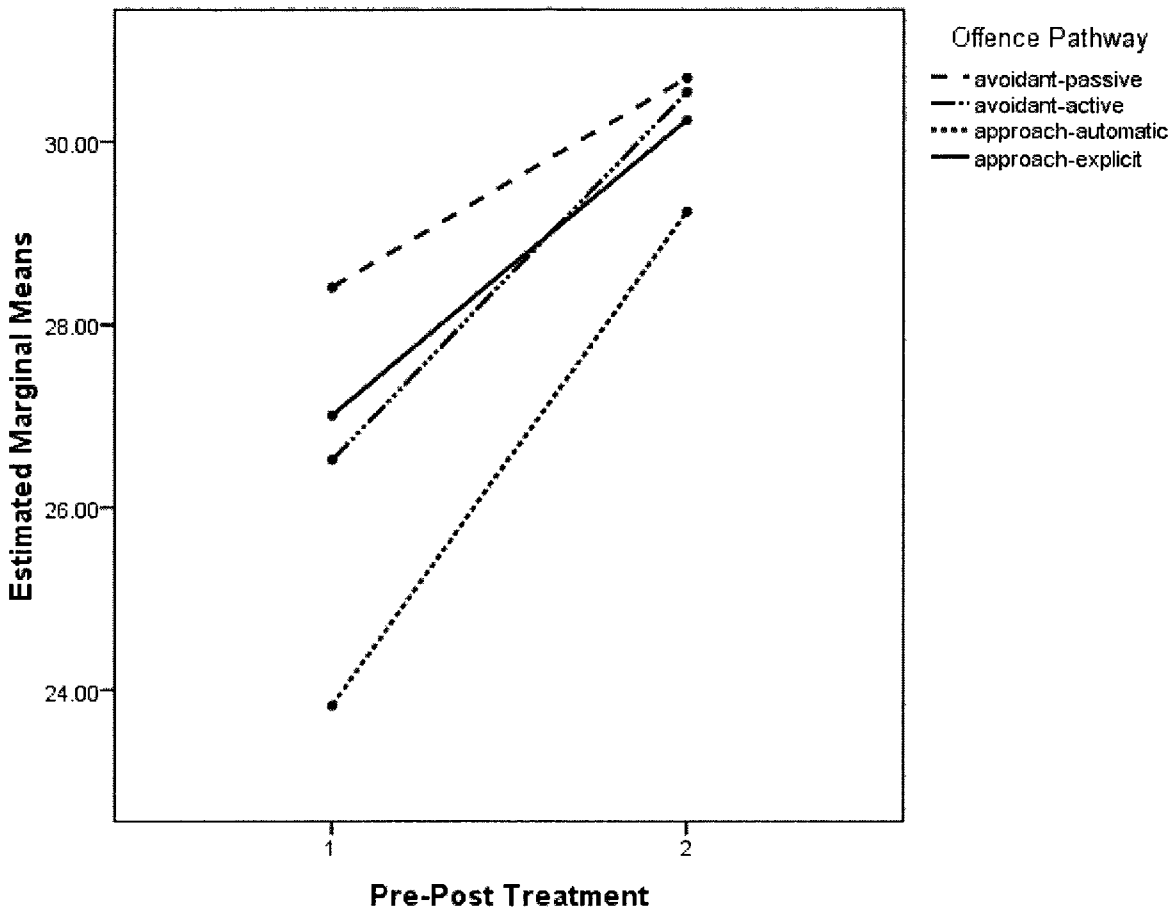

Figure 11. Pre-Post Treatment Change on SOARS (AVH), as a function of Offence Pathway.

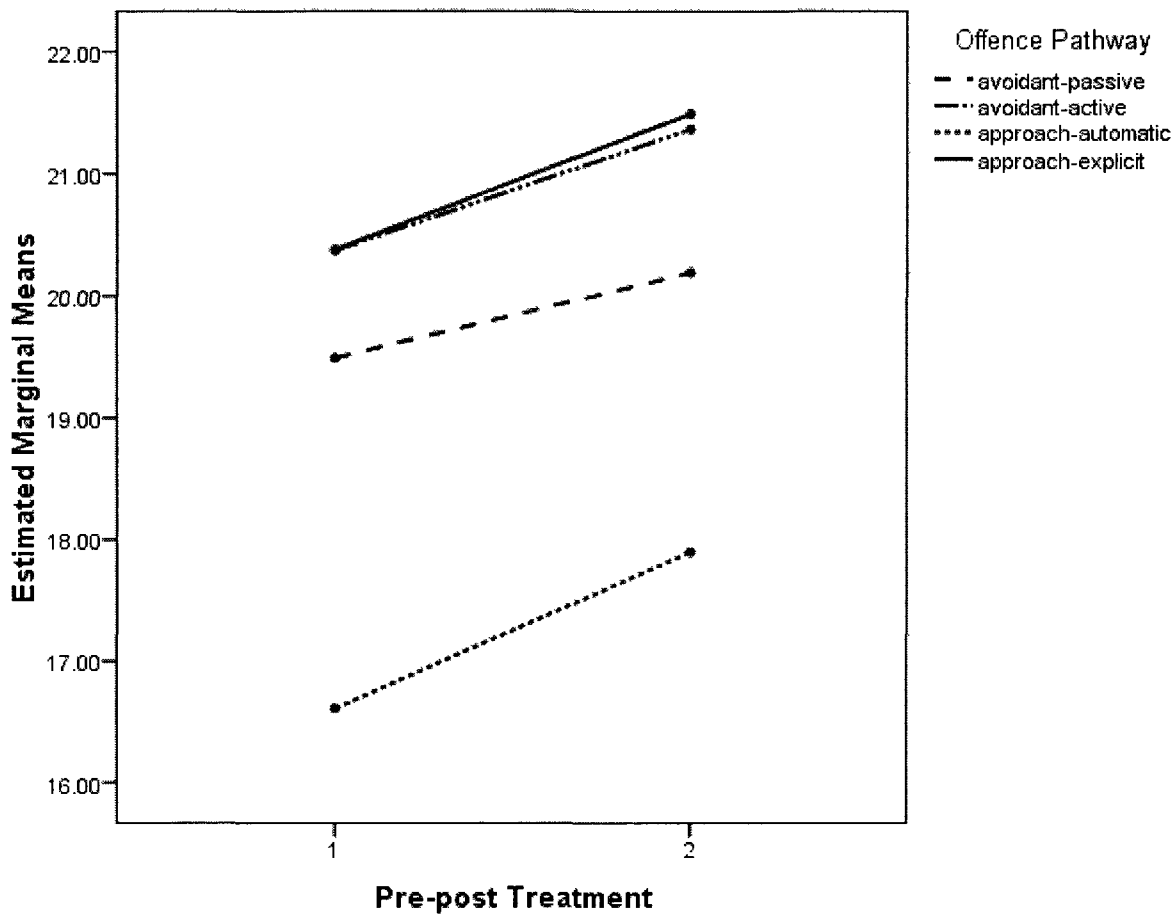

Figure 12. Pre-Post Treatment Change on SOARS (MC), as a function of Offence Pathway.

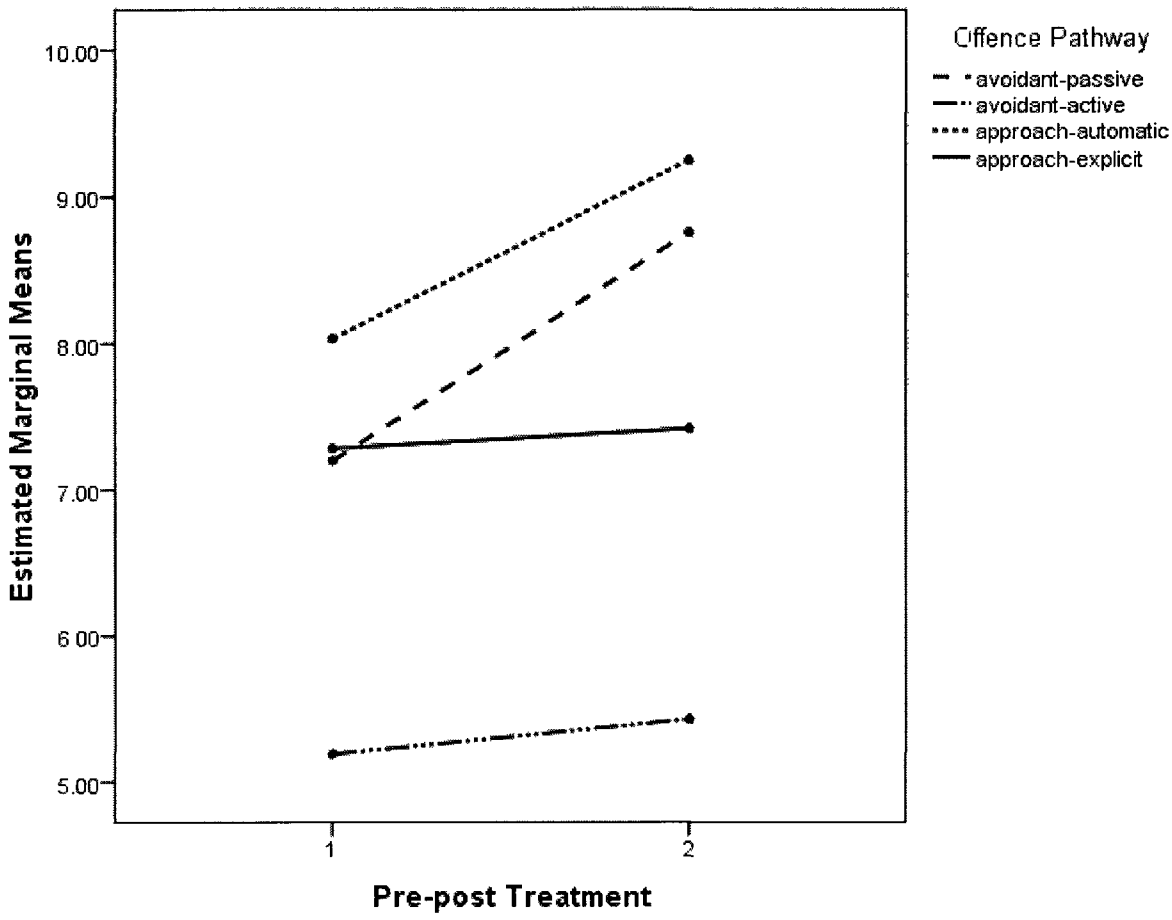

Figure 13. Pre-Post Treatment Change on SOARS (JSO), as a function of Offence Pathway.

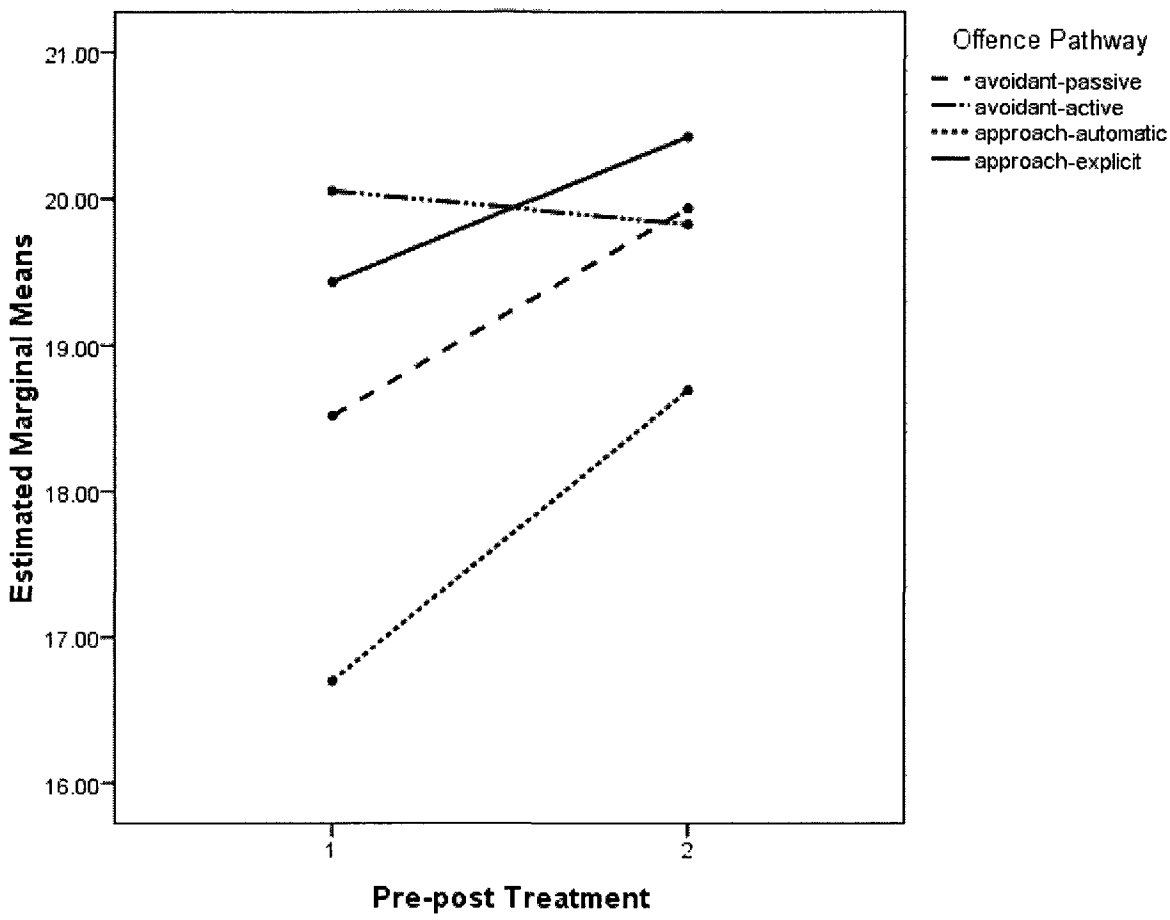

Figure 14. Pre-Post Treatment Change on SOARS (ASI), as a function of Offence Pathway.

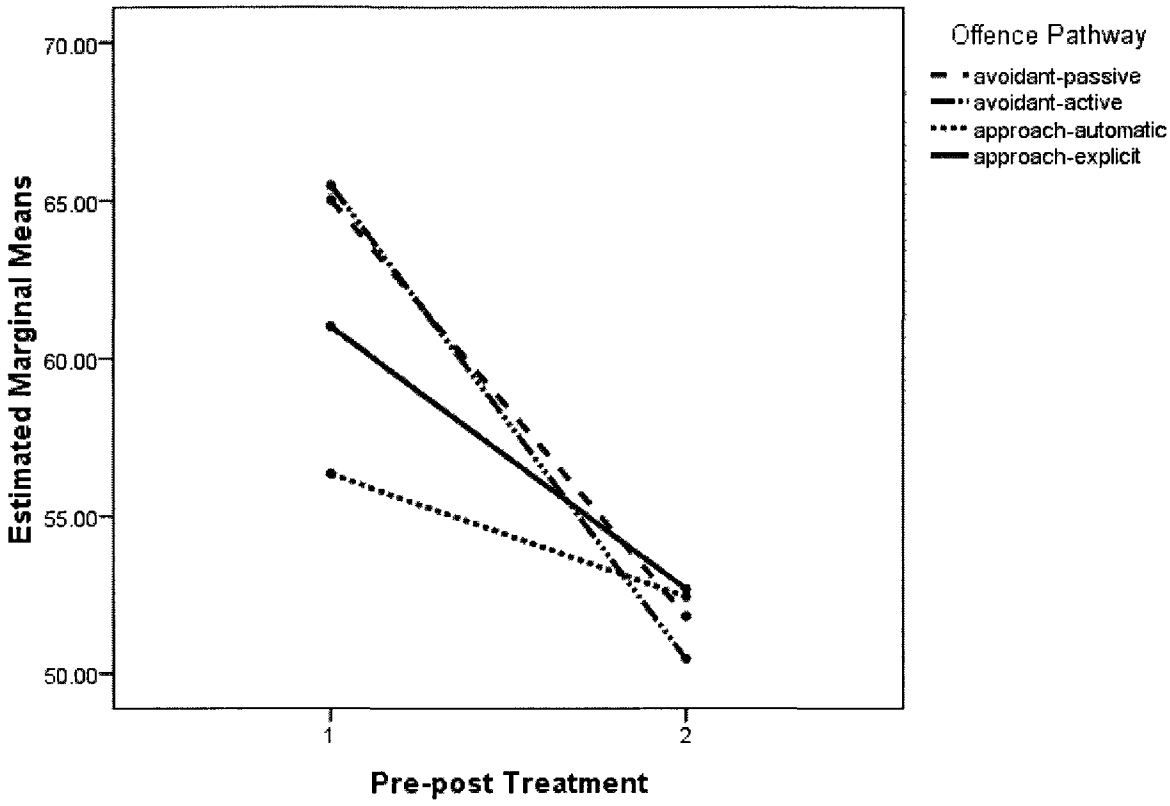

Figure 15. Pre-Post Treatment Change on Bumby-M, as a function of Offence Pathway.

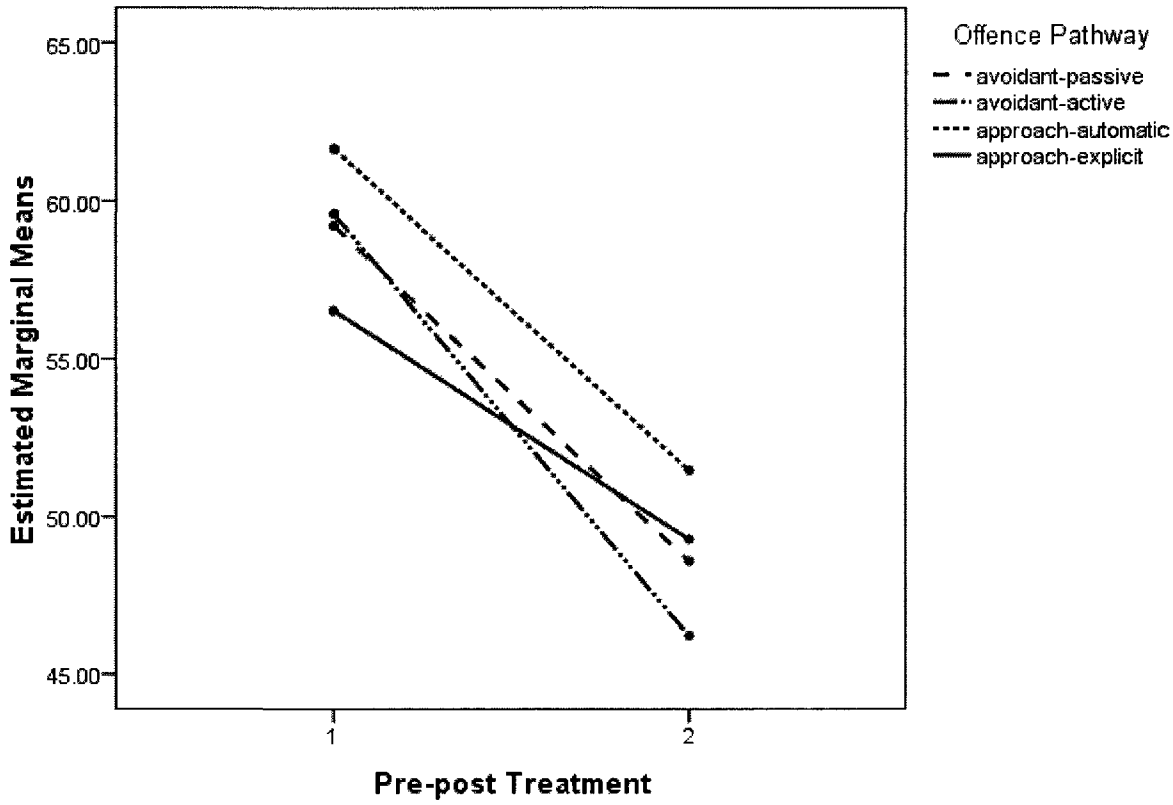

Figure 16. Pre-Post Treatment Change on Bumby-R, as a function of Offence Pathway.

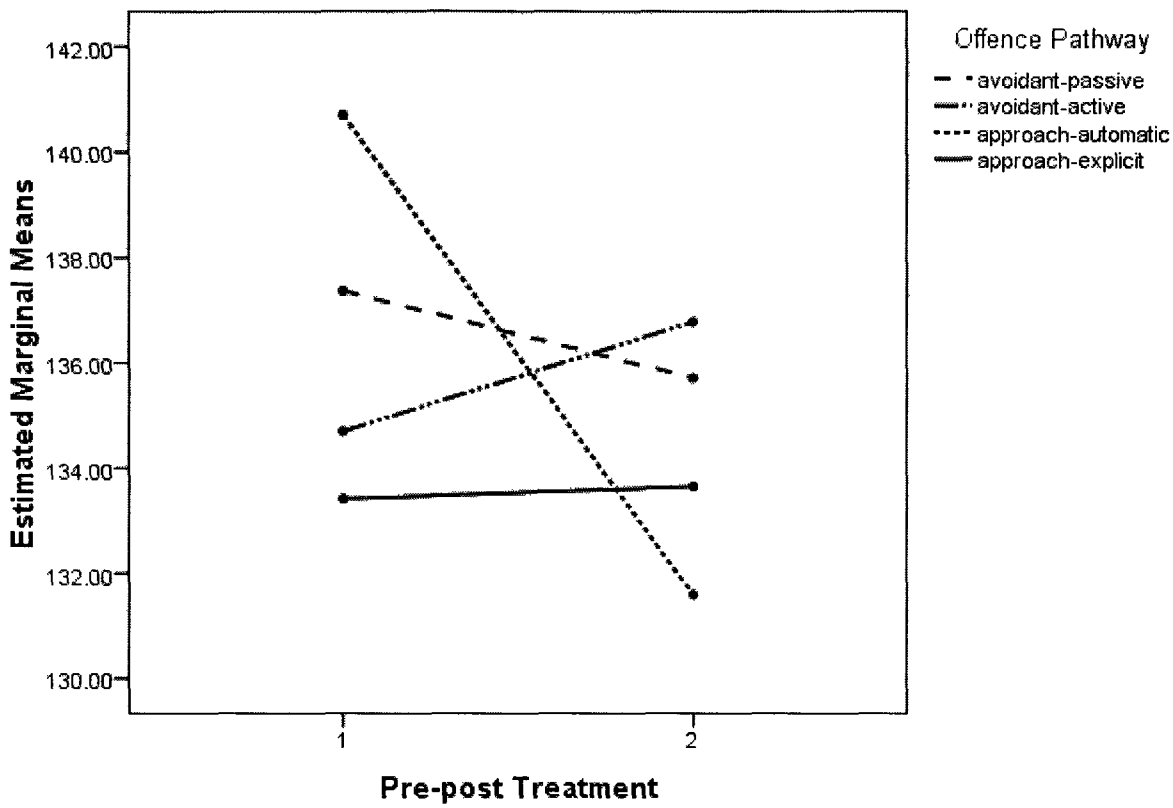

Figure 17. Pre-Post Treatment Change on MSIS, as a function of Offence Pathway.

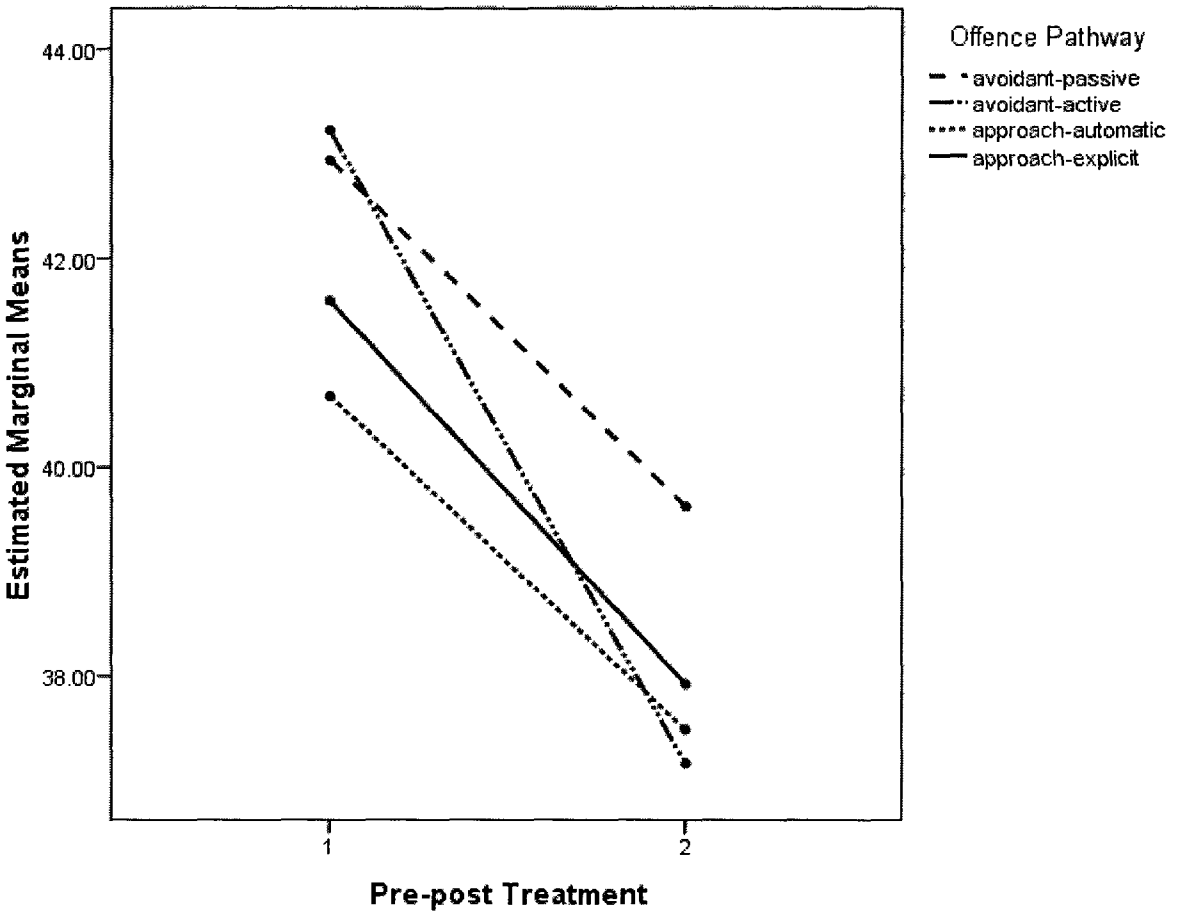

Figure 18. Pre-Post Treatment Change on UCLA, as a function of Offence Pathway.

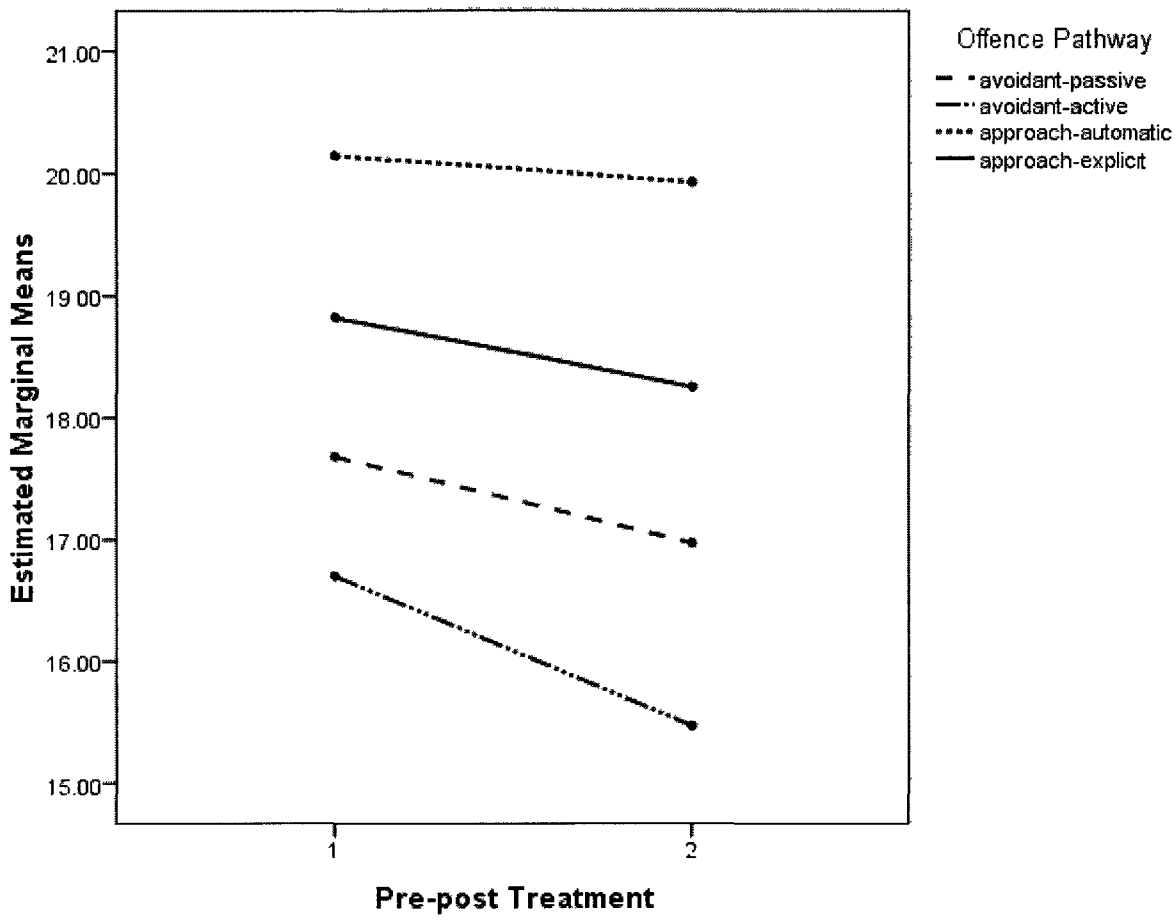

Figure 19. Pre-Post Treatment Change on AI: Physical, as a function of Offence Pathway.

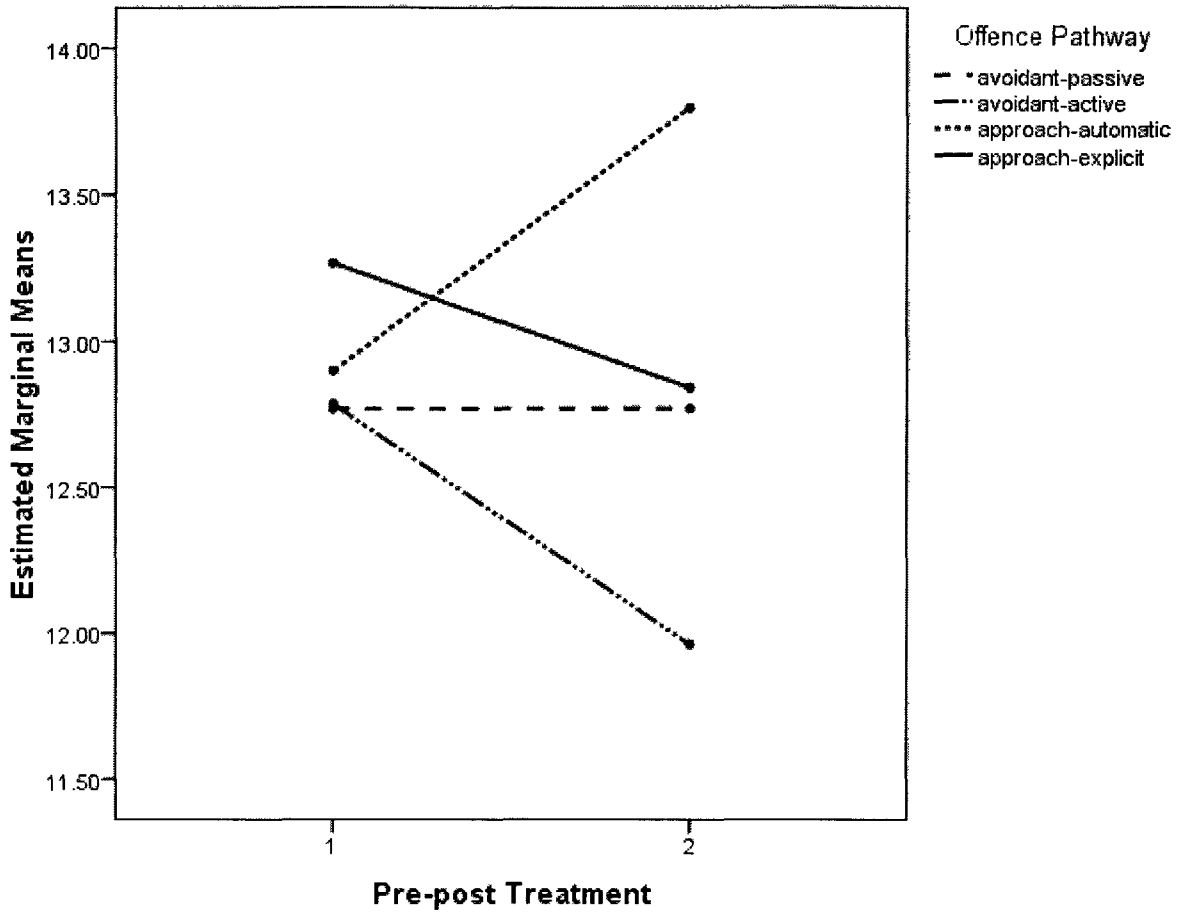

Figure 20. Pre-Post Treatment Change on AI: Verbal, as a function of Offence Pathway.

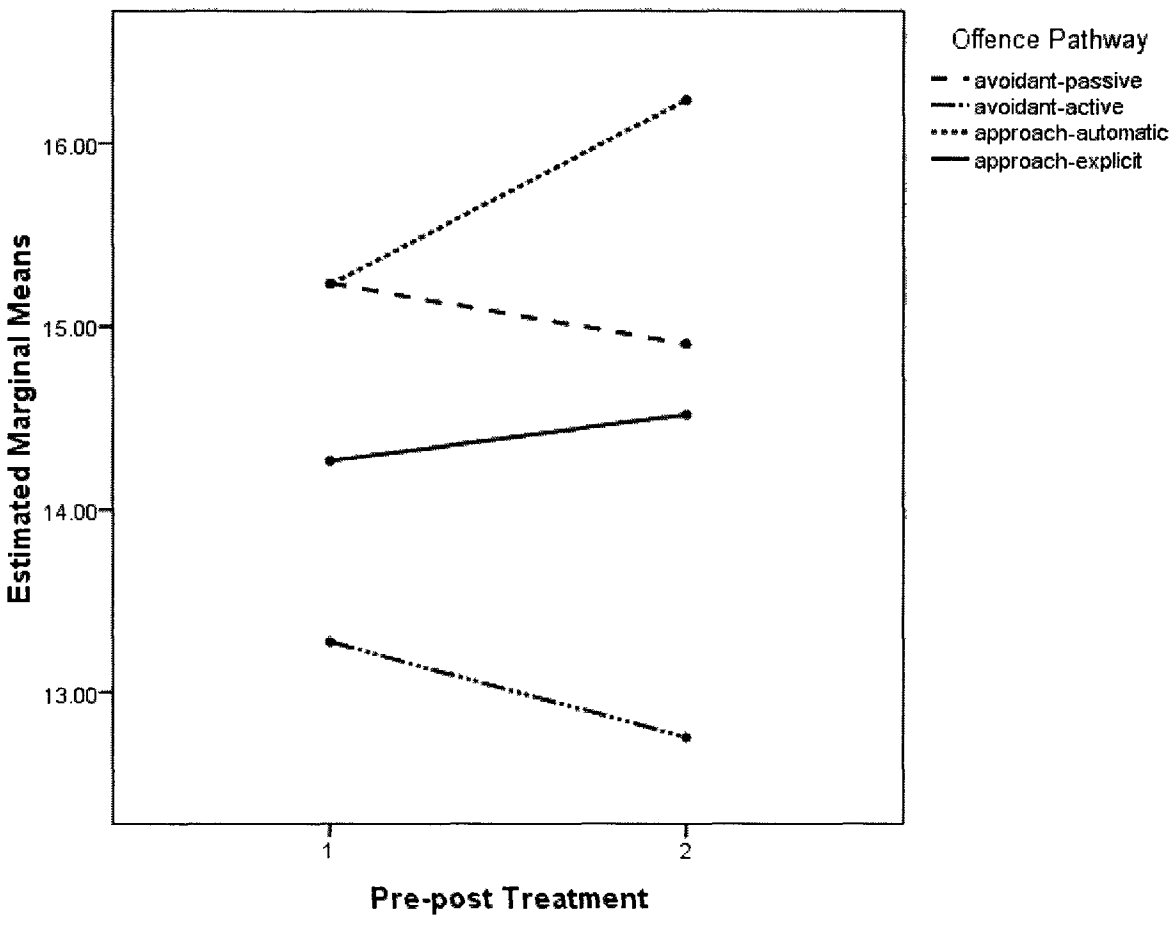

Figure 21. Pre-Post Treatment Change on AI: Anger, as a function of Offence Pathway.

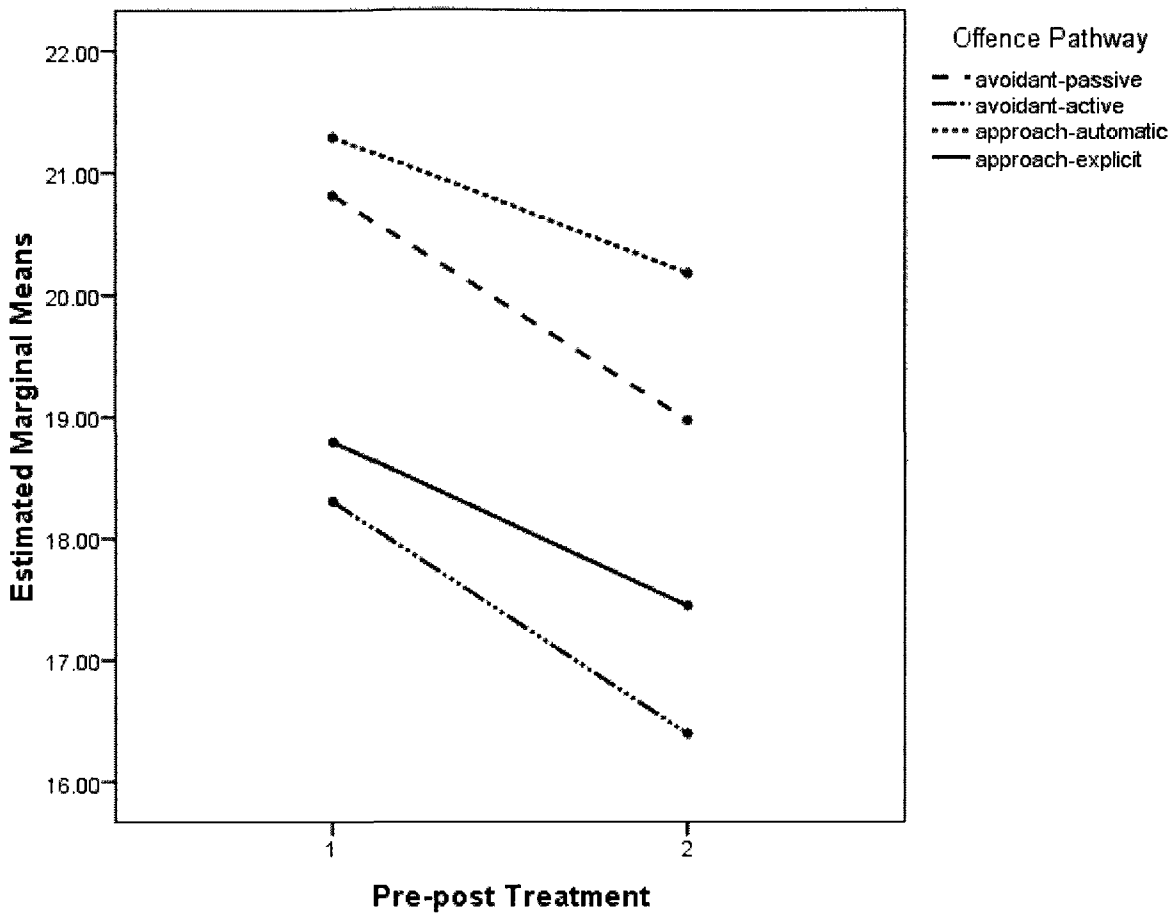

Figure 22. Pre-Post Treatment Change on AI: Hostility, as a function of Offence Pathway.

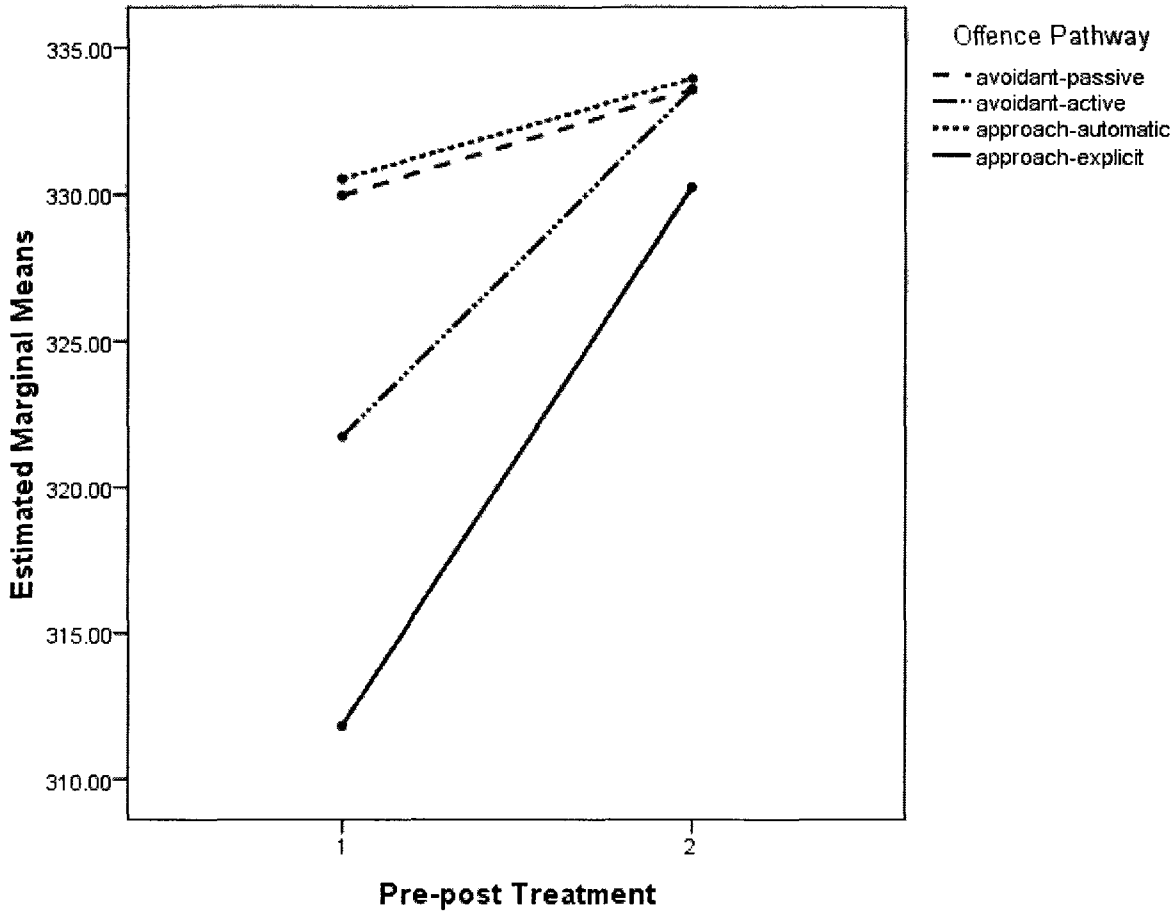

Figure 23. Pre-Post Treatment Change on CMEM: 1, as a function of Offence Pathway.

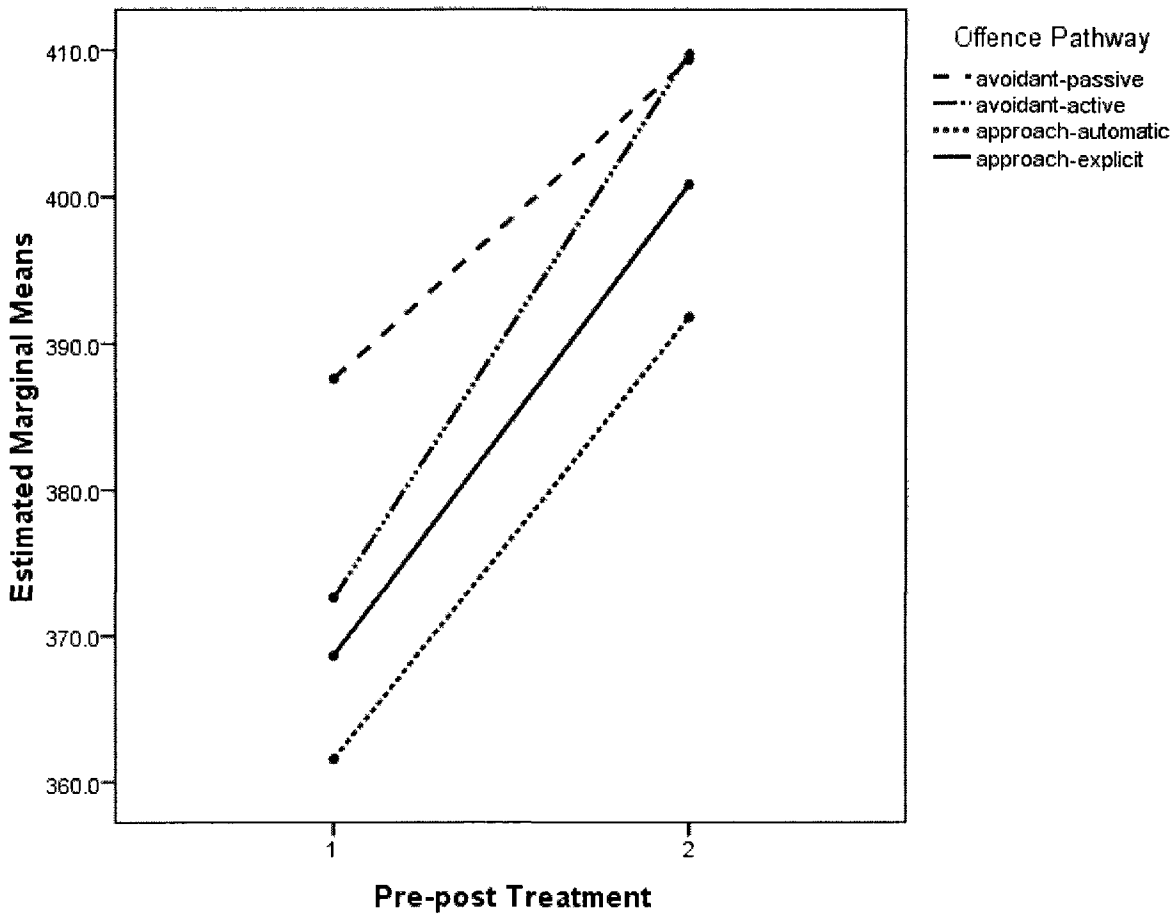

Figure 24. Pre-Post Treatment Change on CMEM: 2, as a function of Offence Pathway.

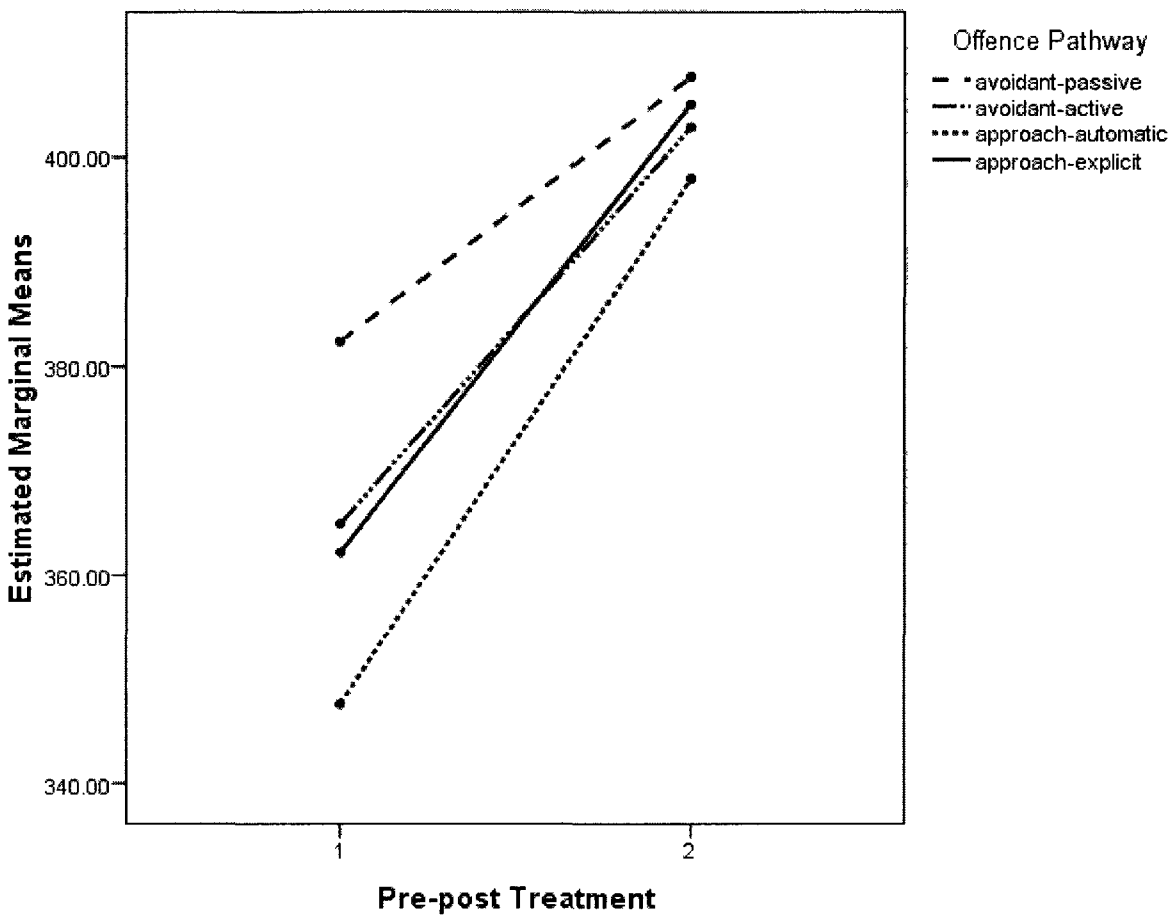

Figure 25. Pre-Post Treatment Change on CMEM: 3, as a function of Offence Pathway.

Appendix A

Informed Consent Form (2000 Version)

Program Description

The purpose of the National Sex Offender Treatment Program is to help offenders learn to reduce and manage their risk for sexual offending behaviour. The goal of treatment is to reduce the risk to re-offend sexually. The program is a moderate/low/maintenance intensity program delivered over approximately (4-5 months/2-3 months/bi-weekly). The Program is delivered in a group setting, with approximately (8/10/12) participants. Some individual sessions with the program delivery officer or psychologist (will/may) also be required.

I understand that, upon completion of treatment, I may be asked to participate in maintenance until it is established that I no longer require follow-up. I understand that this is to assist me to maintain and/or enhance the gains made during participation in treatment

The National Sex Offender Treatment Program includes lectures, group discussion, individual exercises, role-plays, written assignments, and individual presentations to the group. The program material is based on effective intervention methods with sex offenders. I understand that successful completion will meet the requirements of my Correctional Plan with regard to treatment in this area.

I understand that I am expected to contribute to group exercises and discussions as well as individual exercises, and to complete homework assignments. I understand that I am expected to attend all program sessions. I understand that repeated unauthorised absences or disruption of the group may result in suspension from the program.

The benefits and consequences of participation have been shared with me. I understand that there will be no negative outcome from the sex offender program as a result of non-participation, but that there may be consequences for non-compliance with my correctional plan.

Assessment

I understand that, at the start and end of the program I will be asked to attend an individual assessment interview. I understand that I will also be asked to complete some paper and pencil questionnaires, before and after the program. These questionnaires look at a my attitudes about a variety of topics before, during, and after the program. I understand that my participation in the group and completion of assignments will also be used in my assessment and evaluation.

I understand that the results of the questionnaires and interviews will be used to determine my areas of need (at intake into the program) and how much has changed in relation to needs areas (exit assessment). I understand that these results will be used for a written

evaluation of my performance. I understand that a copy of this report will be placed on my file and shared with my parole officer, National Parole Board, and other persons or agencies who require and are authorised to access this information.

I understand that the results of assessment will also be used to evaluate the overall effectiveness of the National Sex Offender Treatment Program. I understand that copies of assessment will be sent to National Headquarters for research and evaluation. When the assessment and results are being used for this purpose, I understand that I will not be identified by name and no entry will be made into my CSC file.

Confidentiality

The limitations of confidentiality have been shared with me. I understand that, should I be at imminent risk to harm myself or others, this information will be shared and acted upon. I understand that information allowing for the identification of child victims must be reported to the police, or any other agency responsible for child protection. I understand that information concerning sexual offences, past or present, will not necessarily be kept private. I understand that reports will be written about my level of risk and progress in the program. I understand that these will be shared with my Parole Officer and may used by the National Parole Board.

Written Evaluation

I understand that, at the beginning of the program, a written report outlining my treatment goals will be written and placed on my file and in OMS, CSC's computerised database. I understand that, at end of the program, a written evaluation of my performance will be completed and placed on my file and in OMS, CSC's computerised database. I understand that I will have the opportunity to review this evaluation and discuss the results, and will be given a printed copy. I understand that this evaluation may be used by the CSC and/or NPB in making decisions about my case (transfer, release, etc.).

Refusal to Participate in the Program

I understand that I can refuse to participate in the assessment process, or withdraw from assessment and treatment at any time. I understand that, if I refuse or withdraw from the assessment process, I will not be accepted into the treatment program at this time. I understand that I can, however, request to be reconsidered for the program at a later time.

I understand that, should I withdraw from the assessment process or from the program, a report summarising my participation and/or my reasons for withdrawal will be written and placed on my file and in OMS.

I understand that refusals and suspensions from the program will be subject to the policies articulated in CD 730 (pay levels).

All of the above information has been explained to me. I agree to participate in the assessment phase of the National Sex Offender Treatment Program.

Name: _____ Date: _____

Witness: _____

I agree to participate in the treatment phase of the National Sex Offender Treatment Program.

Name: _____ Date: _____

Witness: _____

Appendix B

ASSESSMENT AND TREATMENT CONSENT FORM

SEX OFFENDER PROGRAM

I, _____, understand that I am being given an opportunity
(print name of offender)
to participate in the Sex Offender Program.

Program Description

The purpose of the National Sex Offender Program is to help offenders learn to reduce and manage their risk for sexual offending behaviour. The goal of treatment is to reduce the risk to re-offend sexually. The program is a (***moderate/low/maintenance***) intensity program delivered over approximately ***(4-5 months; 2-3 months; indefinitely)***. The program is delivered in a group setting, with approximately ***(8/10/12)*** participants. Some individual sessions with the program delivery officer or psychologist ***(will/may)*** also be required. I understand that, upon completion of a treatment program, I may be asked to participate in a maintenance program until it is established that I no longer require follow-up. I understand that this is to assist me to maintain and/or enhance the gains made during participation in treatment.

The National Sex Offender Program includes lectures, group discussion, individual exercises, role-plays, written assignments, and individual presentations to the group. The program material is based on effective intervention methods with sexual offenders. I understand that successful completion may meet the requirements of my Correctional Plan with regard to treatment in this area. I understand that I am expected to contribute to group exercises and discussions as well as individual exercises, and to complete homework assignments. I understand that I am expected to attend all program sessions. I understand that repeated unauthorised absences or disruption of the group may result in suspension from the program.

The benefits and consequences of participation have been shared with me. I understand that failure to participate in the program may have some unintended negative consequences in my correctional plan.

Assessment

I understand that, at the start and end of the program I will be asked to attend an individual assessment interview. I understand that I will also be asked to complete some paper-and-pencil questionnaires, before and after the program. These questionnaires look at my attitudes about a variety of topics before, during, and after the program. I understand that my participation in the group and completion of assignments will also be used in my assessment and evaluation of progress and performance in the program.

I understand that the results of the questionnaires and interviews will be used to determine my areas of need (at intake into the program) and how much has changed in relation to need areas (exit assessment). I understand that these results will be used for a written evaluation of my performance. I understand that a copy of this report will be placed on my file and shared with me, my parole officer, the National Parole Board, and other persons or agencies who require and are authorised to access this information. I understand that copies of the questionnaires will be placed in my CSC psychology file.

I understand that the results of assessment will also be used to evaluate the overall effectiveness of the National Sex Offender Program. I understand that copies of assessment will be sent to National Headquarters for research and evaluation. When the assessment and results are being used for this purpose, I understand that I will not be identified by name and no entry will be made into my CSC file.

I understand that I may be videotaped during treatment exercises, such as role-plays. I understand the treatment facilitators may be videotaped during the program for their evaluations. I understand that all videotaped materials are confidential.

Confidentiality

The limitations of confidentiality have been shared with me. I understand that, should I be at imminent risk to harm myself or others, this information will be shared and acted upon. I understand that information concerning sexual offences or any offences against a child, past or present, will not necessarily be kept confidential. I understand that reports will be written about my level of risk and progress in the program. I understand that these will be shared with my Parole Officer and may used by the National Parole Board.

Written Evaluation

I understand that, at the beginning of the program, a written report outlining my treatment goals will be prepared and placed on my file and in OMS, CSC's computerised database. I understand that, at end of the program, a written evaluation of my performance will be completed and placed on my file and in the Offender Management System (OMS). I understand that I will have the opportunity to review this evaluation and discuss the results, and will be given a printed copy. I understand that this evaluation may be used by the CSC and/or the National Parole Board, in making decisions about my case (transfer, release, etc.).

Refusal to Participate in the Program

I understand that I can refuse to participate in the assessment process, or can withdraw from assessment. I understand that, if I refuse or withdraw from the assessment process, I will not be accepted into the treatment program at this time. I understand that I can, however, request to be reconsidered for the program at a later time.

I understand that, should I withdraw from the treatment program, a report summarising my participation and/or my reasons for withdrawal will be written and placed on my file and in OMS. I understand that refusals and suspensions from the program will be subject to the policies articulated in CD 730 (pay levels). I understand that if I refuse to participate in the treatment program, or if I withdraw from the treatment process, I can request to be reconsidered for the program at a later time.

All of the above information has been explained to me. I agree or refuse to participate in the National Sex Offender Program, as indicated below.

I, _____, agree / refuse (circle one) to participate in
(Name of Offender)
the National Sex Offender Program.

Signature of Offender: _____

Date: _____

Name of Witness: _____

Title: _____

Signature of Witness: _____

Appendix C

SOCIAL SCIENCES AND HUMANITIES RESEARCH ETHICS BOARD CERTIFICATION OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Social Sciences and Humanities Research Ethics Board (REB) has examined the application for ethical approval for the research project **The Offence Progression in Sexual Offenders: An Examination of the Self-Regulation Model of the Relapse Process (File # 03-07-06)** submitted by Drew Kingston and supervised by Philip Firestone of the School of Psychology. The members of the REB found that the research project met appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards, and accordingly gave the research project a Category Ia (Approval).

This certification is valid for one year from the date indicated below.

October 29, 2007

Catherine Paquet

Assistant-Director Interim (Ethics)

For Peter Beyer, Chair of the SSH REB

Appendix D

CORRECTIONAL SERVICE OF CANADA RESEARCH APPLICATION AND UNDERTAKING: CERTIFICATION OF ETHICAL APPROVAL

Correctional Service Canada / Service correctionnel Canada

PROTECTED / PROTÉGÉE A ☒ B ☐ C ☐ ONCE COMPLETE / UNE FOIS REMPLI

RESEARCH PROJECT – PROJET DE RECHERCHE

PROJECT TITLE: - TITRE DU PROJET :

The Offence Progression in Sexual Offenders : An Examination of the Self-Regulation Model of the Relapse Process

PROJECT DESCRIPTION: - DESCRIPTION DU PROJET

This research project proposes to evaluate the self-regulation model as utilized in the CSC's National Sex Offender Programs. Approximately 230 sexual offenders who have completed the national programs will comprise the participants in this evaluation. This is a multi-year proposal to be completed in concurrence with th University of Ottawa, as a doctoral dissertation. The specific areas to be addressed are as follows; (1) to examine the discriminant validity of the four pathways, as described in the model. That is, the degree to which the four pathways differ with respect to offender type, offender characteristics (i.e., demographics), risk for recidivism (i.e., risk assessment measures), and various self-report measures (e.g., empathy); and, (2) an analysis of pre-and post-treatment change on the measures included in the programs battery.

TYPE/CLASS OF INFORMATION REQUESTED: - TYPE ET CLASSE DES RENSEIGNEMENTS :

The methodology requires no operational disruption. Pre-and post-program assessment materials are collected according to standard procedures for screening offenders into the program and following the completion of the program. Additional information will be retrieved from OMS. The data will only be used for the stated purpose in this proposal.

PRIMARY RESEARCHER – CHERCHEUR PRINCIPAL

a) Name and Title - Nom et titre	Operational Unit - Unité	Sector - Secteur	Region - Région
Drew A. Kingston Ph.D candidate, Univesity of Ottawa Program Assistant, Sex Offender	Reintegration Programs	Correctional Operations/Programs (COP)	National

APPROVAL - APPROBATION

Primary Researcher Director- Supérieur du chercheur principal	Signature	Date Y-A M D-J
Brian A. Grant, DGR		2007-10-23

Appendix E

CLASSIFICATION OF OFFENCE PATHWAY

1. Offence-Related Goal

Item	Score
Desire to Prevent Offending	
Cognitive Distortions	
Attitude Toward Offending	
Post-Offence Evaluation	
Goal Score	
Goal Selected: ☐ ***Avoidant*** ☐ ***Approach***	

2. Offence Strategy

Item	Score
Offence Planning	
Skills	
Control Over Offending Behaviour	
Strategy Score	
Strategy Selected: ☐ ***Passive/Automatic*** ☐ ***Active/Explicit***	

Interpretive Ranges and Pathway Classifications

Theoretically informed but not empirically validated

Goal

Score	Goal Type
0 - 2	Avoidant
3 - 5	Can't Code/Undetermined
6 - 8	Approach

Strategy

Score	Goal Type
0 - 2	Passive/Automatic
3	Can't Code/Undetermined
4 - 6	Active/Explicit

		Strategy	
		Passive/Automatic	Active/Explicit
Goal	Avoidant	Avoidant-passive	Avoidant-active
	Approach	Approach-automatic	Approach-explicit

Appendix F

Risk Assessment Measures
Static99 CODING SHEET

Risk Factor	Codes		Score
Prior Sex Offences (Same rules as in RRASOR)	Charges None 1-2 3-5 6 +	Convictions None 1 2-3 4 +	 0 1 2 3
Prior sentencing dates (excluding index)	3 or less 4 or more		0 1
Any convictions for non-contact sex offences	No Yes		0 1
Index non-sexual violence	No Yes		0 1
Prior non-sexual violence	No Yes		0 1
Any unrelated victims	No Yes		0 1
Any stranger victims	No Yes		0 1
Any male victims	No Yes		0 1
Young	Aged 25 or older Aged 18 – 24 99		0 1
Single	Ever lived with lover for at least two years? Yes No		 0 1
Total Score	**Add up scores from individual risk factors**		

Appendix G

Violence Risk Scale: Sex Offender Version

	Pre-Tx (a)	**F 1**†	**F 2**	**F 3**	**Stage of Change**††	***# of Stages changed x .5*** *(b)*	**Post-Tx** *(a-b)*†††	**F 1**	**F 2**	**F 3**	**I or N**
D1 Sexually Deviant Lifestyle	0 1 2 3				P/C P A M	1.5 1 .5 0					
D2 Sexual Compulsivity	0 1 2 3				P/C P A M	1.5 1 .5 0					
D3 Offence Planning	0 1 2 3				P/C P A M	1.5 1 .5 0					
D4 Criminal Personality	0 1 2 3				P/C P A M	1.5 1 .5 0					
D5 Cognitive Distortions	0 1 2 3				P/C P A M	1.5 1 .5 0					
D6 Interpersonal Aggression	0 1 2 3				P/C P A M	1.5 1 .5 0					
D7 Emotional Control	0 1 2 3				P/C P A M	1.5 1 .5 0					
D8 Insight	0 1 2 3				P/C P A M	1.5 1 .5 0					
D9 Substance Abuse	0 1 2 3				P/C P A M	1.5 1 .5 0					
D10 Community Support	0 1 2 3				P/C P A M	1.5 1 .5 0					
D11 Release to High Risk Situations	0 1 2 3				P/C P A M	1.5 1 .5 0					
D12 Sexual Offending Cycle	0 1 2 3				P/C P A M	1.5 1 .5 0					
D13 Impulsivity	0 1 2 3				P/C P A M	1.5 1 .5 0					
D14 Compliance with Community Superv.	0 1 2 3				P/C P A M	1.5 1 .5 0					
D15 Treatment Compliance	0 1 2 3				P/C P A M	1.5 1 .5 0					
D16 Deviant Sexual Preference	0 1 2 3				P/C P A M	1.5 1 .5 0					
Total Dynamic Factor Score →	Pre-Tx:	*Factors:* 1 2 3			***Total Dynamic Factor Score*** →		Post-Tx:	*Factors:* 1 2 3			
Total Static Factor Score From Previous Page →					**Total Static Factor Score From Previous Page** →						
Total Static + Total Dynamic Factor Score →					**Total Static + Total Dynamic Factor Score** →						

Appendix H

STABLE 2000

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.

1) **Significant Social Influences** . . . . . .
(See Page 8 of this manual for scoring, Enter your final scoring)

2) **Intimacy Deficits**
   1) **Lovers/Intimate Partners**
   2) **Emotional Identification with Children**
   3) **Hostility toward Women**
   4) **General Social Rejection/Loneliness**
   5) **Lack of Concern for Others**

3) **Sexual Self-regulation**
   1) **Sex Drive/Pre-occupation**
   2) **Sex as Coping**
   3) **Deviant Sexual Interests**

4) **Attitudes Supportive of Sexual Assault**
   1) **Sexual Entitlement**
   2) **Rape Attitudes**
   3) **Child Molester Attitudes**

5) **Co-operation with Supervision** . . . . . .

6) **General Self-regulation**
   1) **Impulsive Acts**
   2) **Poor Cognitive Problem Solving Skills**
   3) **Negative Emotionality/Hostility**

Total the six large boxes for Total Score

12

Appendix I **Self-Report Measures**

Balanced Inventory of Desirable Responding

		Not True			Somewhat True		Very True
1.	My first impressions of people usually turn out to be right.	1	2	3	4	5	6	7
2.	It would be hard for me to break any of my bad habits.	1	2	3	4	5	6	7
3.	I don't care to know what other people really think of me.	1	2	3	4	5	6	7
4.	I have not always been honest with myself.	1	2	3	4	5	6	7
5.	I always know why I like things.	1	2	3	4	5	6	7
6.	When my emotions are aroused, it biases my thinking.	1	2	3	4	5	6	7
7.	Once I made up my mind, other people can seldom change my opinion.	1	2	3	4	5	6	7
8.	I am not a safe driver when I exceed the speed limit.	1	2	3	4	5	6	7
9.	I am fully in control of my own fate.	1	2	3	4	5	6	7
10.	It's hard for me to shut off a disturbing thought.	1	2	3	4	5	6	7

	Not True			Somewhat True			Very True
11. I never regret my decisions	1	2	3	4	5	6	7
12. I sometimes lose out on things because I can't make up my mind soon enough.	1	2	3	4	5	6	7
13. The reason I vote is because my vote can make a difference.	1	2	3	4	5	6	7
14. My parents were not always fair when they punished me.	1	2	3	4	5	6	7
15. I am a completely rational person.	1	2	3	4	5	6	7
16. I rarely appreciate criticism.	1	2	3	4	5	6	7
17. I am very confident of my judgements.	1	2	3	4	5	6	7
18. I have sometimes doubted my ability as a lover.	1	2	3	4	5	6	7
19. It's all right with me if some people happen to dislike me.	1	2	3	4	5	6	7
20. I don't always know the reasons why I do the things I do.	1	2	3	4	5	6	7
21. I sometimes tell lies if I have to.	1	2	3	4	5	6	7
22. I never cover up my mistakes.	1	2	3	4	5	6	7
23. There have been occasions when I have taken advantage of someone.	1	2	3	4	5	6	7
24. I never swear.	1	2	3	4	5	6	7
25. I sometimes try to get even rather than forgive and forget.	1	2	3	4	5	6	7
26. I always obey laws, even if I'm unlikely to get caught.	1	2	3	4	5	6	7

	Not True			Somewhat True			Very True
27. I have said something bad about a friend behind his or her back.	1	2	3	4	5	6	7
28. When I hear people talking privately, I avoid listening.	1	2	3	4	5	6	7
29. I have received too much change from a salesperson without telling him or her.	1	2	3	4	5	6	7
30. I always declare everything at customs.	1	2	3	4	5	6	7
31. When I was young I sometimes stole things.	1	2	3	4	5	6	7
32. I have never dropped litter on the street.	1	2	3	4	5	6	7
33. I sometimes drive faster than the speed limit.	1	2	3	4	5	6	7
34. I never read sexy books or magazines.	1	2	3	4	5	6	7
35. I have done things that I don't tell other people about.	1	2	3	4	5	6	7
36. I never take things that don't belong to me.	1	2	3	4	5	6	7
37. I have taken sick leave from work or school even though I wasn't really sick.	1	2	3	4	5	6	7
38. I have never damaged a library book or store merchandise without reporting it.	1	2	3	4	5	6	7
39. I have some pretty awful habits.	1	2	3	4	5	6	7
40. I don't gossip about other people's business.	1	2	3	4	5	6	7

Appendix J

Sex Offender Acceptance of Responsibility Scale

How much do you agree with each of the statements below?

The numbers have the following meaning:

0	1	2	3	4
Do Not Agree at All	Agree a Little	Agree Moderately	Agree Quite a bit	Agree Strongly

Beside each of the following statements, circle the number that shows how much you agree with each statement

		Do Not Agree at All	Agree a Little	Agree Moderately	Agree Quite a Bit	Agree Strongly
1.	I want to learn more about controlling my sexual behaviour.	**0**	**1**	**2**	**3**	**4**
2.	In the past, I have broken the law with my sexual behaviour.	**0**	**1**	**2**	**3**	**4**
3.	I caused a lot of harm to the victim(s) of my sexual offending.	**0**	**1**	**2**	**3**	**4**
4.	I sexually offended because I felt bad about myself.	**0**	**1**	**2**	**3**	**4**

		Do Not Agree at All	Agree a Little	Agree Moderately	Agree Quite a Bit	Agree Strongly
5.	I certainly never planned on committing a sexual offence.	0	1	2	3	4
6.	I am the real victim in my current situation.	0	1	2	3	4
7.	I already know that I would never commit a sexual offence in the future.	0	1	2	3	4
8.	Before I sexually offended, I had thoughts about doing something like that.	0	1	2	3	4
9.	I wouldn't have sexually offended if I had not been so upset at the time.	0	1	2	3	4
10.	I have to face the fact that I committed a sexual offence.	0	1	2	3	4
11.	I can handle my problems by myself.	0	1	2	3	4
12.	My sexual offending really messed up my victim(s).	0	1	2	3	4
13.	Sometimes I find myself thinking about sex.	0	1	2	3	4
14.	I had sexual thoughts or fantasies that led to my sexual offending.	0	1	2	3	4
15.	My sexual offending happened because I was a very sick person at the time.	0	1	2	3	4
16.	My sexual offending just happened.	0	1	2	3	4
17.	I know that I did not commit any sexual offence.	0	1	2	3	4
18.	Victims of sexual offences usually lie about how they were harmed to make things worse for the offender.	0	1	2	3	4

	Do Not Agree at All	Agree a Little	Agree Moderately	Agree Quite a Bit	Agree Strongly
19. I think I still have something to learn about controlling my sexual behaviour.	0	1	2	3	4
20. I could become aroused from watching someone undress.	0	1	2	3	4
21. I sexually offended because no one would take my problems seriously.	0	1	2	3	4
22. Honestly, I don't think I am a sexual offender.	0	1	2	3	4
23. The victim(s) of my sexual offending recovered quickly.	0	1	2	3	4
24. I can get aroused thinking about sex.	0	1	2	3	4
25. It's not like I wanted to commit a sexual offence.	0	1	2	3	4
26. If the truth had been told, I would not have been accused of committing a sexual offence.	0	1	2	3	4
27. I really don't know whether or not I have a sexual problem that I need to work on.	0	1	2	3	4
28. I am responsible for the fact that my victim(s) experienced many problems as a result of my sexual offending.	0	1	2	3	4
29. I could never get sexually aroused just thinking about someone attractive.	0	1	2	3	4
30. I committed a sexual offence because someone got me aroused.	0	1	2	3	4
31. I know that I have a sexual behaviour problem.	0	1	2	3	4
32. Sometimes I have difficulty controlling my problems, but I am working on it.	0	1	2	3	4

	Do Not Agree at All	Agree a Little	Agree Moderately	Agree Quite a Bit	Agree Strongly
33. I could never become sexually aroused from seeing a picture of a naked person.	0	1	2	3	4
34. I set things up to make my sexual offending possible.	0	1	2	3	4
35. My sexual offending happened because someone made me angry.	0	1	2	3	4
36. My sexual offending didn't harm anyone.	0	1	2	3	4
37. Before I sexually offended, I definitely did not have thoughts about doing that.	0	1	2	3	4
38. I have imagined what it would be like to have sex with someone.	0	1	2	3	4
39. My sexual offending happened because I was using alcohol or drugs at the time.	0	1	2	3	4
40. I already know everything I have to do to make sure I will never commit a sexual offence in the future.	0	1	2	3	4
41. My sexual offending didn't cause any real harm to the victim(s).	0	1	2	3	4
42. I have a sexual behaviour problem that I still need help with.	0	1	2	3	4
43. I could never become sexually aroused watching a movie.	0	1	2	3	4
44. I was totally out of control at the time that I committed the sexual offence(s).	0	1	2	3	4
45. I know that I am a sexual offender	0	1	2	3	4
46. When I see someone that I find attractive, I never think about having sex with them.	0	1	2	3	4

	Do Not Agree at All	Agree a Little	Agree Moderately	Agree Quite a Bit	Agree Strongly
47. Before I sexually offended, I had sexual thoughts or fantasies about it.	0	1	2	3	4
48. I committed a sexual offence because I could not handle my problems.	0	1	2	3	4
49. My sexual behaviour has never harmed anyone other than myself.	0	1	2	3	4
50. I would not have sexually offended if the victim(s) had acted differently.	0	1	2	3	4
51. My sexual offending caused many problems for my victim(s).	0	1	2	3	4
52. The law says that I committed a sexual offence, but where I am from that kind of thing is common.	0	1	2	3	4
53. My victim(s) are partly to blame for my sexual offending.	0	1	2	3	4

Appendix K

Bumby Cognition Scales

Please read each statement carefully and circle the number that indicates how you feel about it. This is about what YOU truly believe, so DO NOT try to answer in a way that you think others will want you to answer.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	When kids don't tell that they were involved in sexual activity with an adult, it is probably because they liked it or weren't bothered by it.	**1**	**2**	**3**	**4**
2.	Most of the time, the only reason a man commits rape is because he was sexually assaulted as a child.	**1**	**2**	**3**	**4**
3.	If a woman gets drunk at a party, it is really her own fault if someone takes advantage of her sexually.	**1**	**2**	**3**	**4**
4.	If a woman does not resist strongly to sexual advances, she is probably willing to have sex.	**1**	**2**	**3**	**4**
5.	Kids who get molested by more than one person probably are doing something to attract adults to them.	**1**	**2**	**3**	**4**
6.	Some people are not "true" child molesters - they are just out of control and made a mistake.	**1**	**2**	**3**	**4**
7.	Some sexual relations with children are a lot like adult sexual relationships.	**1**	**2**	**3**	**4**

		Strongly Disagree	Disagree	Agree	Strongly Agree
8.	Women often falsely accuse men of rape.	1	2	3	4
9.	A lot of men who rape do so because they are deprived of sex.	1	2	3	4
10.	Sometimes, touching a child sexually is a way to show love and affection.	1	2	3	4
11.	A lot of times, kids make up stories about people molesting them because they want to get attention.	1	2	3	4
12.	Many women have a secret desire to be forced into having sex.	1	2	3	4
13.	Trying to stay away from children is probably enough to prevent a molester from molesting again.	1	2	3	4
14.	Women usually want sex no matter how they can get it.	1	2	3	4
15.	Women who get raped probably deserve it.	1	2	3	4
16.	I think child molesters often get longer sentences than they really should.	1	2	3	4
17.	A lot of women who get raped had "bad reputations" in the first place.	1	2	3	4
18.	Most of the men who rape have stronger sexual urges than other men.	1	2	3	4
19.	Men who commit rape are probably responding to a lot of stress in their lives, and raping helps to reduce that stress.	1	2	3	4
20.	A lot of times, sexual assaults on children are not planned...they just happen.	1	2	3	4
21.	Children can give adults more acceptance and love than other adults.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
22. Since prostitutes sell their bodies for sexual purposes anyway, it is not as bad if someone forces them into sex.	1	2	3	4
23. If a person does not use force to have sexual activity with a child, it will not harm the child as much.	1	2	3	4
24. Some young children are much more adult-like than other children.	1	2	3	4
25. Before the police investigate a woman's claim of rape, it is a good idea to find out what she was wearing, if she had been drinking, and what kind of a person she is.	1	2	3	4
26. Sometimes molesters suffer the most, lose the most, or are hurt the most, as a result of a sexual assault on a child more than a child suffers, loses, or is hurt.	1	2	3	4
27. Victims of rape are usually a little bit to blame for what happens.	1	2	3	4
28. Children who come into the bathroom when an adult is getting undressed or going to the bathroom are probably just trying to see the adult's genitals	1	2	3	4
29. A lot of times, when women say "no", they are just playing hard to get and really mean "yes".	1	2	3	4
30. Some men who molest children don't like molesting children.	1	2	3	4
31. On a date, when a man spends a lot of money on a woman, the woman ought at least to give the man something in return sexually.	1	2	3	4
32. Many children who are sexually assaulted do not experience many major problems because of the assaults	1	2	3	4
33. Sometimes, victims initiate sexual activity.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
34. I believe society and the courts are too tough on rapists.	1	2	3	4
35. When women wear tight clothes, short skirts, and no bra or underwear, they are just asking for sex.	1	2	3	4
36. If a child looks at an adult's genitals, the child is probably interested in sex.	1	2	3	4
37. If a woman goes to the home of a man on the first date, she probably wants to have sex with him.	1	2	3	4
38. Generally, rape is not planned - a lot of times it just happens.	1	2	3	4
39. There is no real manipulation or threat used in a lot of sexual assaults on children.	1	2	3	4
40. Some kids like sex with adults because it makes them feel wanted and loved.	1	2	3	4
41. If a person tells himself that he will never rape again, he probably won't.	1	2	3	4
42. Women who go to bars a lot are mainly looking to have sex.	1	2	3	4
43. Some children can act very seductively.	1	2	3	4
44. Women who get raped will eventually forget about it and get on with their lives.	1	2	3	4
45. When a woman gets raped more than once, she is probably doing something to cause it.	1	2	3	4
46. If women did not sleep around so much, they would be less likely to get raped.	1	2	3	4
47. As long as a man does not slap or punch a woman in the process, forcing her to have sex is not as bad.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
48. Just fondling a child is not as bad as penetrating a child, and will probably not affect the child as much.	1	2	3	4
49. Having sexual thoughts and fantasies about a child isn't all that bad because it is not really hurting the child.	1	2	3	4
50. I believe that, if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way.	1	2	3	4
51. During sexual assaults on children, some men ask their victims if they liked what they were doing because they wanted to please the child and make them feel good.	1	2	3	4
52. Often, a woman reports rape long after the fact because she gets mad at the man she had sex with and is trying to get back at him.	1	2	3	4
53. When women act like they are too good for men, most men probably think about raping the women to put them in their place.	1	2	3	4
54. Many men sexually assault children because of stress, and molesting helped to relieve that stress.	1	2	3	4
55. Part of a wife's duty is to satisfy her husband sexually whenever he wants it, whether or not she is in the mood.	1	2	3	4
56. A lot of women claim they were raped just because they want attention.	1	2	3	4
57. Sometimes children don't say "no" to sexual activity because they are curious about sex or enjoy it.	1	2	3	4
58. If most child molesters hadn't been sexually abused as a child, then THEY probably never would have molested a child.	1	2	3	4
59. Just fantasising about forcing someone to have sex isn't all that bad since no one is really being hurt.	1	2	3	4
60. Some children are willing and eager to have sexual activity with adults.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
61. Some men sexually assaulted children because they really thought the children would enjoy how it felt.	1	2	3	4
62. The reason a lot of women say "no" to sex is because they don't want to seem loose.	1	2	3	4
63. Most women are sluts and get what they deserve.	1	2	3	4
64. Society makes a much bigger deal out of sexual activity with children than it really is.	1	2	3	4
65. Children who have been involved in sexual activity with an adult will eventually get over it and go on with their lives.	1	2	3	4
66. Sexual activity with children can help the child learn about sex.	1	2	3	4
67. It is better to have sex with one's child than to cheat on one's wife.	1	2	3	4
68. I believe that any woman can prevent herself from being raped if she really wants to.	1	2	3	4
69. Since some victims tell the offender it feels good when the offender touches them, the child probably enjoys it and it probably won't affect the child much.	1	2	3	4
70. If a man has had sex with a woman before, then he should be able to have sex with her any time he wants.	1	2	3	4
71. I believe that sex with children can make the child feel closer to adults.	1	2	3	4
72. If a person tells himself that he will never molest again, then he probably won't.	1	2	3	4
73. Some people turn to children for sex because they are deprived of sex from adult women.	1	2	3	4
74. I think the main thing wrong with sexual activity with children is that it's against the law.	1	2	3	4

Appendix L

Miller Social Intimacy Scale

Think about your intimate ***relationship that you are in now***. If you are not in a relationship, think about your most recent relationship. Read each of the statements carefully and circle the number that indicates how much the statement applies to you.

		Very Rarely				Some of the time				Almost Always	
1.	When you have leisure time, how often do you choose to spend it with him/her alone?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2.	How often do you keep personal information to yourself and do not share it with him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
3.	How often do you show him/her affection?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
4.	How often do you confide very personal information to him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
5.	How often are you able to understand his/her feelings?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
6.	How often do you feel close to him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
7.	How much do you like to spend time alone with him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
8.	How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
9.	How close do you feel to him/her most of the time?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

	Very Rarely				Some of the time				Almost Always	
10. How important is it to you to listen to his/her very personal disclosures.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
11. How affectionate do you feel towards him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
12. How satisfying is your relationship with him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
13. How important is it to you that he/she understands your feelings?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
14. How much damage is caused by a typical disagreement in your relationship with him/her?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
15. How important is it to you that he/she be encouraging and supporting you when you are unhappy?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
16. How important is it to you that he/she show you affection?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
17. How important is your relationship with him/her in your life?	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Appendix M

UCLA Loneliness Scale

Indicate how often you feel the way described in each of the following statements. Circle one number for each.

		Never	Rarely	Sometimes	Often
1.	I feel in tune with the people around me.	**1**	**2**	**3**	**4**
2.	I lack companionship.	**1**	**2**	**3**	**4**
3.	There is no one I can turn to.	**1**	**2**	**3**	**4**
4.	I do not feel alone.	**1**	**2**	**3**	**4**
5.	I feel part of a group of friends.	**1**	**2**	**3**	**4**
6.	I have a lot in common with the people around me.	**1**	**2**	**3**	**4**
7.	I am no longer close to anyone.	**1**	**2**	**3**	**4**
8.	My interests and ideas are not shared by those around me.	**1**	**2**	**3**	**4**
9.	I am an outgoing person.	**1**	**2**	**3**	**4**
10.	There are people I feel close to.	**1**	**2**	**3**	**4**

	Never	Rarely	Sometimes	Often
11. I feel left out.	1	2	3	4
12. My social relationships are superficial.	1	2	3	4
13. No one really knows me well.	1	2	3	4
14. I feel isolated from others.	1	2	3	4
15. I can find companionship when I want.	1	2	3	4
16. There are people who really understand me.	1	2	3	4
17. I am unhappy being so withdrawn.	1	2	3	4
18. People are around me but not with me.	1	2	3	4
19. There are people I can talk to.	1	2	3	4
20. There are people I can turn to.	1	2	3	4

Appendix N

Empathy Measure #1 (Child Victim)

In answering the following questions, there are no right or wrong answers. I am only interested in how you **really** feel about these things. In asking people these questions, I have got a lot of different answers, so it is clear that different people think quite differently about these issues. I simply want you to be honest about **your** feelings and beliefs.

There are six parts to the questionnaire, and you will be asked how you feel about a child (boy or girl) in each instance. Please be sure to answer every question in each of the six parts.

After reading a brief passage, you will have to indicate either how the **child** in the passage feels, or how **you** feel about the child. You should circle the number on the scale that most accurately reflects your opinion.

For example, if you were asked if a child was made happy by the experience in the passage, and you thought that she was happy to a certain degree, you would circle the number 5 as follows:

	Not at All	To Some Degree	Very Much
Happy	0 1 2 3 4 (5) 6 7 8 9 10		

If you thought the child was made very happy by the experience, then you would circle the number 10 as follows:

	Not at All	To Some Degree	Very Much
Happy	0 1 2 3 4 5 6 7 8 9 (10)		

If you thought the child was made very unhappy by the experience, then you would circle the number 0 as follows:

	Not at All			To Some Degree						Very Much
Happy	(0)	1	2	3	4	5	6	7	8	9	10

If you thought the child was made a little unhappy, or occasionally unhappy, you might want to circle a number between 0 and 5. If you thought the child was made reasonably happy but not necessarily very unhappy, you might want to circle a number somewhere between 5 and 10. Please try to use all of the scale when answering. If you have any questions please ask for help. Otherwise, go ahead and answer each question.

1a) I want you to think about a child who was disfigured in a car accident and had to spend a month in a hospital. This child is now out of the hospital and will live with a permanent disfigurement. Now I want you to circle the number that best indicates the degree to which you think this child would be expressing the following emotions, thoughts or behaviours.

		Not at All			To Some Degree						Very Much
1.	Guilty	0	1	2	3	4	5	6	7	8	9	10
2.	Sad	0	1	2	3	4	5	6	7	8	9	10
3.	Angry	0	1	2	3	4	5	6	7	8	9	10
4.	Self-confident	0	1	2	3	4	5	6	7	8	9	10
5.	Nightmares	0	1	2	3	4	5	6	7	8	9	10
6.	Fearful of close relationships	0	1	2	3	4	5	6	7	8	9	10
7.	Suicidal thoughts	0	1	2	3	4	5	6	7	8	9	10

8.	Problems with school work	**0 1 2 3 4 5 6 7 8 9 10**
9.	Fearful of being hurt	**0 1 2 3 4 5 6 7 8 9 10**
10.	Successful at school	**0 1 2 3 4 5 6 7 8 9 10**
11.	Repulsed by sex	**0 1 2 3 4 5 6 7 8 9 10**
12.	Well-adjusted attitude to sex	**0 1 2 3 4 5 6 7 8 9 10**
13.	Sleep disturbances	**0 1 2 3 4 5 6 7 8 9 10**
14.	Feelings of loneliness	**0 1 2 3 4 5 6 7 8 9 10**

	Not at All				To Some Degree						Very Much
15. Withdrawn from others	0	1	2	3	4	5	6	7	8	9	10
16. Tense	0	1	2	3	4	5	6	7	8	9	10
17. Relaxed	0	1	2	3	4	5	6	7	8	9	10
18. Has psychiatric problems	0	1	2	3	4	5	6	7	8	9	10
19. Has low energy	0	1	2	3	4	5	6	7	8	9	10
20. Shows tendency to blame him/herself for all problems	0	1	2	3	4	5	6	7	8	9	10
21. Feelings of helplessness	0	1	2	3	4	5	6	7	8	9	10
22. Argues with others	0	1	2	3	4	5	6	7	8	9	10
23. Fearful of being alone	0	1	2	3	4	5	6	7	8	9	10
24. A tendency to cling to his/her mother	0	1	2	3	4	5	6	7	8	9	10
25. Proud of self	0	1	2	3	4	5	6	7	8	9	10
26. Is in pain	0	1	2	3	4	5	6	7	8	9	10
27. Upset	0	1	2	3	4	5	6	7	8	9	10
28. Feels sinful	0	1	2	3	4	5	6	7	8	9	10
29. Feels dirty	0	1	2	3	4	5	6	7	8	9	10
30. Ashamed	0	1	2	3	4	5	6	7	8	9	10

1b) I want you to think about a child (boy or girl) who has had sex with an adult male. These sexual acts occurred several times over several months, but have now stopped. Now I want you to circle the number that best indicates the degree to which you think this child would be expressing the following emotions, thoughts or behaviours.

	Not at All				To Some Degree						Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Self-confident	0	1	2	3	4	5	6	7	8	9	10
5. Nightmares	0	1	2	3	4	5	6	7	8	9	10
6. Fearful of close relationships	0	1	2	3	4	5	6	7	8	9	10
7. Suicidal thoughts	0	1	2	3	4	5	6	7	8	9	10
8. Problems with school work	0	1	2	3	4	5	6	7	8	9	10
9. Fearful of being hurt	0	1	2	3	4	5	6	7	8	9	10
10. Successful at school	0	1	2	3	4	5	6	7	8	9	10
11. Repulsed by sex	0	1	2	3	4	5	6	7	8	9	10
12. Well-adjusted attitude to sex	0	1	2	3	4	5	6	7	8	9	10
13. Sleep disturbances	0	1	2	3	4	5	6	7	8	9	10
14. Feelings of loneliness	0	1	2	3	4	5	6	7	8	9	10

	Not at All				To Some Degree						Very Much
15. Withdrawn from others	0	1	2	3	4	5	6	7	8	9	10
16. Tense	0	1	2	3	4	5	6	7	8	9	10
17. Relaxed	0	1	2	3	4	5	6	7	8	9	10
18. Has psychiatric problems	0	1	2	3	4	5	6	7	8	9	10
19. Has low energy	0	1	2	3	4	5	6	7	8	9	10
20. Shows tendency to blame him/herself for all problems	0	1	2	3	4	5	6	7	8	9	10
21. Feelings of helplessness	0	1	2	3	4	5	6	7	8	9	10
22. Argues with others	0	1	2	3	4	5	6	7	8	9	10
23. Fearful of being alone	0	1	2	3	4	5	6	7	8	9	10
24. A tendency to cling to his/her mother	0	1	2	3	4	5	6	7	8	9	10
25. Proud of self	0	1	2	3	4	5	6	7	8	9	10
26. Is in pain	0	1	2	3	4	5	6	7	8	9	10
27. Upset	0	1	2	3	4	5	6	7	8	9	10
28. Feels sinful	0	1	2	3	4	5	6	7	8	9	10
29. Feels dirty	0	1	2	3	4	5	6	7	8	9	10
30. Ashamed	0	1	2	3	4	5	6	7	8	9	10

1c) I want you to think about your own victim(s), and the experience they had with you. Now I want you to circle the number that best indicates the degree to which you think this child would be expressing the following emotions, thoughts or behaviours.

	Not at All				To Some Degree					Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Self-confident	0	1	2	3	4	5	6	7	8	9	10
5. Nightmares	0	1	2	3	4	5	6	7	8	9	10
6. Fearful of close relationships	0	1	2	3	4	5	6	7	8	9	10
7. Suicidal thoughts	0	1	2	3	4	5	6	7	8	9	10
8. Problems with school work	0	1	2	3	4	5	6	7	8	9	10
9. Fearful of being hurt	0	1	2	3	4	5	6	7	8	9	10
10. Successful at school	0	1	2	3	4	5	6	7	8	9	10
11. Repulsed by sex	0	1	2	3	4	5	6	7	8	9	10
12. Well-adjusted attitude to sex	0	1	2	3	4	5	6	7	8	9	10
13. Sleep disturbances	0	1	2	3	4	5	6	7	8	9	10
14. Feelings of loneliness	0	1	2	3	4	5	6	7	8	9	10

	Not at All				To Some Degree					Very Much	
15. Withdrawn from others	0	1	2	3	4	5	6	7	8	9	10
16. Tense	0	1	2	3	4	5	6	7	8	9	10
17. Relaxed	0	1	2	3	4	5	6	7	8	9	10
18. Has psychiatric problems	0	1	2	3	4	5	6	7	8	9	10
19. Has low energy	0	1	2	3	4	5	6	7	8	9	10
20. Shows tendency to blame him/herself for all problems	0	1	2	3	4	5	6	7	8	9	10
21. Feelings of helplessness	0	1	2	3	4	5	6	7	8	9	10
22. Argues with others	0	1	2	3	4	5	6	7	8	9	10
23. Fearful of being alone	0	1	2	3	4	5	6	7	8	9	10
24. A tendency to cling to his/her mother	0	1	2	3	4	5	6	7	8	9	10
25. Proud of self	0	1	2	3	4	5	6	7	8	9	10
26. Is in pain	0	1	2	3	4	5	6	7	8	9	10
27. Upset	0	1	2	3	4	5	6	7	8	9	10
28. Feels sinful	0	1	2	3	4	5	6	7	8	9	10
29. Feels dirty	0	1	2	3	4	5	6	7	8	9	10
30. Ashamed	0	1	2	3	4	5	6	7	8	9	10

1d) I want you to think about a child who was disfigured in a car accident and had to spend a month in a hospital. This child is now out of the hospital and will live with a permanent disfigurement. This time, indicate how ***you*** feel about what the child has experienced.

	Not at All				To Some Degree						Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Sexual	0	1	2	3	4	5	6	7	8	9	10
5. Pain	0	1	2	3	4	5	6	7	8	9	10
6. Affection	0	1	2	3	4	5	6	7	8	9	10
7. Upset	0	1	2	3	4	5	6	7	8	9	10
8. Proud	0	1	2	3	4	5	6	7	8	9	10
9. Devastated	0	1	2	3	4	5	6	7	8	9	10
10. Helpless	0	1	2	3	4	5	6	7	8	9	10
11. Responsible	0	1	2	3	4	5	6	7	8	9	10
12. Sick	0	1	2	3	4	5	6	7	8	9	10
13. Good	0	1	2	3	4	5	6	7	8	9	10
14. Frustrated	0	1	2	3	4	5	6	7	8	9	10
15. Hopeful	0	1	2	3	4	5	6	7	8	9	10
16. Trusting	0	1	2	3	4	5	6	7	8	9	10
17. Ashamed	0	1	2	3	4	5	6	7	8	9	10
18. Disgusted	0	1	2	3	4	5	6	7	8	9	10
19. Curious	0	1	2	3	4	5	6	7	8	9	10
20. Shocked	0	1	2	3	4	5	6	7	8	9	10

1e) I want you to think about a child (boy or girl) who has had sex with an adult male. These sexual acts occurred several times over several months, but have now stopped. This time, indicate how ***you*** feel about what this child has experienced.

	Not at All				To Some Degree						Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Sexual	0	1	2	3	4	5	6	7	8	9	10
5. Pain	0	1	2	3	4	5	6	7	8	9	10
6. Affection	0	1	2	3	4	5	6	7	8	9	10
7. Upset	0	1	2	3	4	5	6	7	8	9	10
8. Proud	0	1	2	3	4	5	6	7	8	9	10
9. Devastated	0	1	2	3	4	5	6	7	8	9	10
10. Helpless	0	1	2	3	4	5	6	7	8	9	10
11. Responsible	0	1	2	3	4	5	6	7	8	9	10
12. Sick	0	1	2	3	4	5	6	7	8	9	10
13. Good	0	1	2	3	4	5	6	7	8	9	10
14. Frustrated	0	1	2	3	4	5	6	7	8	9	10
15. Hopeful	0	1	2	3	4	5	6	7	8	9	10
16. Trusting	0	1	2	3	4	5	6	7	8	9	10
17. Ashamed	0	1	2	3	4	5	6	7	8	9	10
18. Disgusted	0	1	2	3	4	5	6	7	8	9	10
19. Curious	0	1	2	3	4	5	6	7	8	9	10
20. Shocked	0	1	2	3	4	5	6	7	8	9	10

1f) I want you to think about your own victim(s), and the experience they had with you. This time, indicate how ***you*** feel about what this child has experienced.

	Not at All				To Some Degree						Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Sexual	0	1	2	3	4	5	6	7	8	9	10
5. Pain	0	1	2	3	4	5	6	7	8	9	10
6. Affection	0	1	2	3	4	5	6	7	8	9	10
7. Upset	0	1	2	3	4	5	6	7	8	9	10
8. Proud	0	1	2	3	4	5	6	7	8	9	10
9. Devastated	0	1	2	3	4	5	6	7	8	9	10
10. Helpless	0	1	2	3	4	5	6	7	8	9	10
11. Responsible	0	1	2	3	4	5	6	7	8	9	10
12. Sick	0	1	2	3	4	5	6	7	8	9	10
13. Good	0	1	2	3	4	5	6	7	8	9	10
14. Frustrated	0	1	2	3	4	5	6	7	8	9	10
15. Hopeful	0	1	2	3	4	5	6	7	8	9	10
16. Trusting	0	1	2	3	4	5	6	7	8	9	10
17. Ashamed	0	1	2	3	4	5	6	7	8	9	10
18. Disgusted	0	1	2	3	4	5	6	7	8	9	10
19. Curious	0	1	2	3	4	5	6	7	8	9	10
20. Shocked	0	1	2	3	4	5	6	7	8	9	10

Appendix O

Empathy Measure #2 (Adult Woman Victim)

Instructions

In answering the following questions, there are no right or wrong answers. I am only interested in how you **really** feel about these things. In asking people these questions, I have got a lot of different answers, so it is clear that different people think quite differently about these issues. I simply want you to be honest about **your** feelings and beliefs.

There are six parts to the questionnaire, and you will be asked how you feel about a woman in each instance. Please be sure to answer every question in each of the six parts.

After reading a brief passage, you will have to indicate either how the **woman** in the passage feels, or how **you** feel about the woman. You should circle the number on the scale that most accurately reflects your opinion.

For example, if you were asked if a woman was made happy by the experience in the passage, and you thought that she was happy <u>to a certain degree</u>, you would circle the number 5 as follows:

	Not at All				To Some Degree					Very Much
Happy	0	1	2	3	4	(5)	6	7	8	9	10

If you thought the woman was made very happy by the experience, then you would circle the number 10 as follows:

	Not at All	To Some Degree	Very Much
Happy	0 1 2 3 4 5 6 7 8 9 (10)		

If you thought the woman was made very unhappy by the experience, then you would circle the number 0 as follows:

	Not at All	To Some Degree	Very Much
Happy	(0) 1 2 3 4 5 6 7 8 9 10		

If you thought the woman was made a little unhappy, or occasionally unhappy, you might want to circle a number between 0 and 5. If you thought the woman was made reasonably happy but not necessarily very unhappy, you might want to circle a number somewhere between 5 and 10. Please try to use all of the scale when answering. If you have any questions please ask for help. Otherwise, go ahead and answer each question.

1a) In this section, I want you to think about an adult woman who has been sexually assaulted by an adult male. The woman has no obvious signs of damage. Now I want you to circle the number that best indicates the degree to which you think this woman would be experiencing the following emotions, thoughts or behaviours.

	Not at All				To Some Degree					Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Self-confident	0	1	2	3	4	5	6	7	8	9	10
5. Nightmares	0	1	2	3	4	5	6	7	8	9	10
6. Fearful of close relationships	0	1	2	3	4	5	6	7	8	9	10
7. Suicidal thoughts	0	1	2	3	4	5	6	7	8	9	10
8. Problems with school work	0	1	2	3	4	5	6	7	8	9	10
9. Fearful of being hurt	0	1	2	3	4	5	6	7	8	9	10
10. Successful at school	0	1	2	3	4	5	6	7	8	9	10
11. Repulsed by sex	0	1	2	3	4	5	6	7	8	9	10
12. Well-adjusted attitude to sex	0	1	2	3	4	5	6	7	8	9	10
13. Sleep disturbances	0	1	2	3	4	5	6	7	8	9	10
14. Feelings of loneliness	0	1	2	3	4	5	6	7	8	9	10

	Not at All				To Some Degree						Very Much
15. Withdrawn from others	0	1	2	3	4	5	6	7	8	9	10
16. Tense	0	1	2	3	4	5	6	7	8	9	10
17. Relaxed	0	1	2	3	4	5	6	7	8	9	10
18. Has psychiatric problems	0	1	2	3	4	5	6	7	8	9	10
19. Has low energy	0	1	2	3	4	5	6	7	8	9	10
20. Shows tendency to blame him/herself for all problems	0	1	2	3	4	5	6	7	8	9	10
21. Feelings of helplessness	0	1	2	3	4	5	6	7	8	9	10
22. Argues with others	0	1	2	3	4	5	6	7	8	9	10
23. Fearful of being alone	0	1	2	3	4	5	6	7	8	9	10
24. A tendency to cling to his/her mother	0	1	2	3	4	5	6	7	8	9	10
25. Proud of self	0	1	2	3	4	5	6	7	8	9	10
26. Is in pain	0	1	2	3	4	5	6	7	8	9	10
27. Upset	0	1	2	3	4	5	6	7	8	9	10
28. Feels sinful	0	1	2	3	4	5	6	7	8	9	10
29. Feels dirty	0	1	2	3	4	5	6	7	8	9	10
30. Ashamed	0	1	2	3	4	5	6	7	8	9	10

1b) Now I want you to think about an adult woman who was disfigured in a car accident and had to spend a month in hospital. The woman is now out of the hospital and will live with a permanent disability. Please circle the number that best indicates the degree to which you think this woman would be experiencing the following emotions, thoughts or behaviours.

	Not at All				To Some Degree					Very Much	
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Self-confident	0	1	2	3	4	5	6	7	8	9	10
5. Nightmares	0	1	2	3	4	5	6	7	8	9	10
6. Fearful of close relationships	0	1	2	3	4	5	6	7	8	9	10
7. Suicidal thoughts	0	1	2	3	4	5	6	7	8	9	10
8. Problems with school work	0	1	2	3	4	5	6	7	8	9	10
9. Fearful of being hurt	0	1	2	3	4	5	6	7	8	9	10
10. Successful at school	0	1	2	3	4	5	6	7	8	9	10
11. Repulsed by sex	0	1	2	3	4	5	6	7	8	9	10
12. Well-adjusted attitude to sex	0	1	2	3	4	5	6	7	8	9	10
13. Sleep disturbances	0	1	2	3	4	5	6	7	8	9	10
14. Feelings of loneliness	0	1	2	3	4	5	6	7	8	9	10

	Not at All				To Some Degree					Very Much	
15. Withdrawn from others	0	1	2	3	4	5	6	7	8	9	10
16. Tense	0	1	2	3	4	5	6	7	8	9	10
17. Relaxed	0	1	2	3	4	5	6	7	8	9	10
18. Has psychiatric problems	0	1	2	3	4	5	6	7	8	9	10
19. Has low energy	0	1	2	3	4	5	6	7	8	9	10
20. Shows tendency to blame him/herself for all problems	0	1	2	3	4	5	6	7	8	9	10
21. Feelings of helplessness	0	1	2	3	4	5	6	7	8	9	10
22. Argues with others	0	1	2	3	4	5	6	7	8	9	10
23. Fearful of being alone	0	1	2	3	4	5	6	7	8	9	10
24. A tendency to cling to his/her mother	0	1	2	3	4	5	6	7	8	9	10
25. Proud of self	0	1	2	3	4	5	6	7	8	9	10
26. Is in pain	0	1	2	3	4	5	6	7	8	9	10
27. Upset	0	1	2	3	4	5	6	7	8	9	10
28. Feels sinful	0	1	2	3	4	5	6	7	8	9	10
29. Feels dirty	0	1	2	3	4	5	6	7	8	9	10
30. Ashamed	0	1	2	3	4	5	6	7	8	9	10

1c) I want you to think about <u>your own</u> victim or victims, and the experience they had with you. Using this scale, circle the number that best indicates the degree that **your victim(s)** would be experiencing the following emotions, thoughts or behaviours.

	Not at All				To Some Degree					Very Much
1. Guilty	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2. Sad	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
3. Angry	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
4. Self-confident	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
5. Nightmares	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
6. Fearful of close relationships	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
7. Suicidal thoughts	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
8. Problems with school work	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
9. Fearful of being hurt	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
10. Successful at school	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
11. Repulsed by sex	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
12. Well-adjusted attitude to sex	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
13. Sleep disturbances	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
14. Feelings of loneliness	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

	Not at All				To Some Degree					Very Much	
15. Withdrawn from others	0	1	2	3	4	5	6	7	8	9	10
16. Tense	0	1	2	3	4	5	6	7	8	9	10
17. Relaxed	0	1	2	3	4	5	6	7	8	9	10
18. Has psychiatric problems	0	1	2	3	4	5	6	7	8	9	10
19. Has low energy	0	1	2	3	4	5	6	7	8	9	10
20. Shows tendency to blame him/herself for all problems	0	1	2	3	4	5	6	7	8	9	10
21. Feelings of helplessness	0	1	2	3	4	5	6	7	8	9	10
22. Argues with others	0	1	2	3	4	5	6	7	8	9	10
23. Fearful of being alone	0	1	2	3	4	5	6	7	8	9	10
24. A tendency to cling to his/her mother	0	1	2	3	4	5	6	7	8	9	10
25. Proud of self	0	1	2	3	4	5	6	7	8	9	10
26. Is in pain	0	1	2	3	4	5	6	7	8	9	10
27. Upset	0	1	2	3	4	5	6	7	8	9	10
28. Feels sinful	0	1	2	3	4	5	6	7	8	9	10
29. Feels dirty	0	1	2	3	4	5	6	7	8	9	10
30. Ashamed	0	1	2	3	4	5	6	7	8	9	10

1d) In this section I want you to think about an adult woman who has been sexually assaulted by an adult male. The woman has no obvious signs of damage. I want you to use the scale to indicate how you feel about what this woman has experienced. Please circle the number that best indicates how **you feel** about this woman's experience.

	Not at All				To Some Degree						Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Sexual	0	1	2	3	4	5	6	7	8	9	10
5. Pain	0	1	2	3	4	5	6	7	8	9	10
6. Affection	0	1	2	3	4	5	6	7	8	9	10
7. Upset	0	1	2	3	4	5	6	7	8	9	10
8. Proud	0	1	2	3	4	5	6	7	8	9	10
9. Devastated	0	1	2	3	4	5	6	7	8	9	10
10. Helpless	0	1	2	3	4	5	6	7	8	9	10
11. Responsible	0	1	2	3	4	5	6	7	8	9	10
12. Sick	0	1	2	3	4	5	6	7	8	9	10
13. Good	0	1	2	3	4	5	6	7	8	9	10
14. Frustrated	0	1	2	3	4	5	6	7	8	9	10
15. Hopeful	0	1	2	3	4	5	6	7	8	9	10
16. Trusting	0	1	2	3	4	5	6	7	8	9	10
17. Ashamed	0	1	2	3	4	5	6	7	8	9	10
18. Disgusted	0	1	2	3	4	5	6	7	8	9	10
19. Curious	0	1	2	3	4	5	6	7	8	9	10
20. Shocked	0	1	2	3	4	5	6	7	8	9	10

1e) Now I want you to think about an adult woman who was disfigured in a car accident and had to spend a month in hospital. The woman is now out of hospital and will live with a permanent disability. Please circle the number that best indicates how you feel about this woman's experience.

	Not at All				To Some Degree						Very Much
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Sexual	0	1	2	3	4	5	6	7	8	9	10
5. Pain	0	1	2	3	4	5	6	7	8	9	10
6. Affection	0	1	2	3	4	5	6	7	8	9	10
7. Upset	0	1	2	3	4	5	6	7	8	9	10
8. Proud	0	1	2	3	4	5	6	7	8	9	10
9. Devastated	0	1	2	3	4	5	6	7	8	9	10
10. Helpless	0	1	2	3	4	5	6	7	8	9	10
11. Responsible	0	1	2	3	4	5	6	7	8	9	10
12. Sick	0	1	2	3	4	5	6	7	8	9	10
13. Good	0	1	2	3	4	5	6	7	8	9	10
14. Frustrated	0	1	2	3	4	5	6	7	8	9	10
15. Hopeful	0	1	2	3	4	5	6	7	8	9	10
16. Trusting	0	1	2	3	4	5	6	7	8	9	10
17. Ashamed	0	1	2	3	4	5	6	7	8	9	10
18. Disgusted	0	1	2	3	4	5	6	7	8	9	10
19. Curious	0	1	2	3	4	5	6	7	8	9	10
20. Shocked	0	1	2	3	4	5	6	7	8	9	10

1f) I want you to think about <u>your own</u> victim or victims and the experiences they had with you. Please circle the number that best describes how **you** feel about the encounters you had with your victim(s).

	Not at All				To Some Degree					Very Much	
1. Guilty	0	1	2	3	4	5	6	7	8	9	10
2. Sad	0	1	2	3	4	5	6	7	8	9	10
3. Angry	0	1	2	3	4	5	6	7	8	9	10
4. Sexual	0	1	2	3	4	5	6	7	8	9	10
5. Pain	0	1	2	3	4	5	6	7	8	9	10
6. Affection	0	1	2	3	4	5	6	7	8	9	10
7. Upset	0	1	2	3	4	5	6	7	8	9	10
8. Proud	0	1	2	3	4	5	6	7	8	9	10
9. Devastated	0	1	2	3	4	5	6	7	8	9	10
10. Helpless	0	1	2	3	4	5	6	7	8	9	10
11. Responsible	0	1	2	3	4	5	6	7	8	9	10
12. Sick	0	1	2	3	4	5	6	7	8	9	10
13. Good	0	1	2	3	4	5	6	7	8	9	10
14. Frustrated	0	1	2	3	4	5	6	7	8	9	10
15. Hopeful	0	1	2	3	4	5	6	7	8	9	10
16. Trusting	0	1	2	3	4	5	6	7	8	9	10
17. Ashamed	0	1	2	3	4	5	6	7	8	9	10
18. Disgusted	0	1	2	3	4	5	6	7	8	9	10
19. Curious	0	1	2	3	4	5	6	7	8	9	10
20. Shocked	0	1	2	3	4	5	6	7	8	9	10

Appendix P

Aggression Questionnaire

Instructions

For each of the following statements, please indicate whether or not the statement is characteristic of you. If the statement is extremely uncharacteristic of you (not at all like you) circle the number "1". If the statement is extremely characteristic of you (very much like you) circle the number "5". Use the following scale to rate each of your statements.

		Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat characteristic	Extremely characteristic
1.	I sometimes feel like a powder keg ready to explode.	1	2	3	4	5
2.	I sometimes feel that people are laughing at me behind my back.	1	2	3	4	5
3.	I have trouble controlling my temper.	1	2	3	4	5
4.	Once in a while I can't control the urge to strike another person.	1	2	3	4	5
5.	I often find myself disagreeing with people.	1	2	3	4	5
6.	I am suspicious of overly friendly strangers.	1	2	3	4	5
7.	Some of my friends think I'm a hothead.	1	2	3	4	5
8.	I have become so mad that I have broken things.	1	2	3	4	5
9.	If somebody hits me, I hit back.	1	2	3	4	5

	Extremely Uncharacteristic	Somewhat Uncharacteri	Uncertain	Somewhat characteristic	Extremely characteristic
10. Other people always seem to get the breaks.	1	2	3	4	5
11. My friends say that I'm somewhat argumentative	1	2	3	4	5
12. If I have to resort to violence to protect my rights, I will.	1	2	3	4	5
13. I flare up quickly but get over it quickly.	1	2	3	4	5
14. When people are especially nice, I wonder what they want.	1	2	3	4	5
15. Sometimes I fly off the handle for no good reason.	1	2	3	4	5
16. I tell my friends openly when I disagree with them.	1	2	3	4	5
17. I have threatened people that I know.	1	2	3	4	5
18. I know that "friends" talk about me behind my back.	1	2	3	4	5
19. When frustrated, I let my irritation show.	1	2	3	4	5
20. I can't help getting into arguments when people disagree with me.	1	2	3	4	5
21. There are people who pushed me so far that we came to blows.	1	2	3	4	5
22. I am an even-tempered person.	1	2	3	4	5
23. I am sometimes eaten up with jealousy.	1	2	3	4	5
24. Given enough provocation, I may hit another person.	1	2	3	4	5
25. When people annoy me, I may tell them what I think of them.	1	2	3	4	5

	Extremely Uncharacteristic	Somewhat Uncharacteri	Uncertain	Somewhat characteristic	Extremely characteristic
26. I wonder why sometimes I feel so bitter about things.	**1**	**2**	**3**	**4**	**5**
27. I can think of no good reason for ever hitting a person.	**1**	**2**	**3**	**4**	**5**
28. At times I feel I have gotten a raw deal out of life.	**1**	**2**	**3**	**4**	**5**
29. I get into fights a little more than the average person.	**1**	**2**	**3**	**4**	**5**