Sexual offending: Theory of problem, theory of change, and implications for treatment effectiveness

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Abstract

This paper focuses on the empirical literature concerning the development, maintenance, and treatment of sexual offending and disparities between this research, current theory, and practice in the field of sex offender treatment. We contend that treatment programs result in only modest reductions in sexual recidivism for two main reasons: flaws in the etiological theory of sexual offending upon which they are established (theory of problem), and flaws in the theory of treatment delivery with respect to the methods undertaken to reduce sexual reoffending (theory of change). These flaws arise from aspects of ‘theory of problem’ and ‘theory of change’ which lack empirical investigation or are contrary to research findings in relevant areas. Specifically, we discuss components of accepted etiological theories which do not yet demonstrate evidence of a causal relationship with sexual recidivism, as well as argue for more research differentiating developmental from maintaining factors in sexual offending. We also discuss specific treatment methods that lack empirical evidence justifying their use, are undertaken despite evidence of contraindication, or require further validation of their effectiveness or necessity. Implications of the above limitations are discussed and recommendations for enhancing treatment effectiveness are offered.

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Keywords: Sexual offenders; Treatment; Evaluation

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“Theory of problem” and “theory of change” analyses have typically been conducted to assess the appropriateness of therapeutic interventions for the treatment of specific mental disorders. For example, one theory of depression holds that depressed individuals make biased interpretations of personal experiences which serve to cause and/or maintain their negative view of themselves, their world, and their future (Beck, 1967). Cognitive therapy was then developed in order to challenge these distorted thoughts and help depressed individuals view the world in a more rational, realistic, and less depressing manner (Beck, Rush, Shaw, & Emery, 1979). Cognitive therapy for depression has been proven efficacious in a number of studies (e.g., Hollon, Harman, & Brown, 2002), possibly because of the direct relationship between a theory of the cause of depression and the therapeutic intervention designed to ameliorate it. A similar analysis might be useful for both examining the suitability of current treatments for sexual offenders and for aiding in the detection of areas where sex offender treatment might be improved.

Despite the widespread existence of sex offender treatment facilities (Knopp, Freeman-Longo, & Stevenson, 1992) and an abundance of literature debating the effectiveness of such programs (e.g., Furby, Weinrott, & Blackshaw, 1989; Hall, 1995; Hanson et al., 2002), little work has specifically examined the relationship between theories of the causes of sexual offending behavior and the therapeutic interventions aimed at reducing future deviant sexual acts. One possible reason that this endeavor has not been undertaken is that there is, at best, a weak relationship between theory, research, and practice in the sex offender domain. This paper seeks to outline some of the major discrepancies between the most widely used treatment approaches, the prevailing etiological theories of sexually deviant behavior, and the empirical literature that has, or more frequently has not, been used to inform both. First, however, a general overview of sex offender treatment approaches and the literature addressing the effectiveness of such programs will be provided.

1. Sex offender treatment

1.1. A history

Early treatments for sex offenders were behavioral in orientation and focused primarily on altering deviant sexual arousal. The underlying theories were heavily influenced by the work of behaviorists such as John Watson and B.F. Skinner describing the development of behaviors through the process of classical (Pavlovian) conditioning (Laws & Marshall, 2003). Throughout the late 1950s and 1960s, theorists in the area of sexual offending argued that deviant sexual preferences were the primary motivators behind sexually deviant behaviors, and believed these preferences to have evolved through the conditioned association of sexual arousal with deviant sexual fantasies (McGuire, Carlisle, & Young, 1965). As such, treatments based on these theories applied behavioral techniques to alter deviant sexual preferences. Aversion therapy, whereby a noxious odor or electric shock is paired with deviant images or acts, was employed to reduce the attractiveness of deviant fantasies and behaviors, with the thought that once deviant arousal is eliminated, sexually deviant behaviors will subsequently cease (Bond & Evans, 1967).

However, reviews of the literature have found little evidence to support a causal relationship between deviant sexual preferences and sexual offending (Marshall, Anderson, & Fernandez, 1999; Rice, Quinsey, & Harris, 1991) or that deviant preferences stem from conditioning processes (O’Donohue & Plaud, 1994). Moreover, there is no evidence that purely behavioral approaches result in long-lasting changes in sexual preferences (Laws & Marshall, 2003), despite evidence of short-term positive effects (e.g., Quinsey, Chaplin, & Cargian, 1980). Not surprisingly, outcome studies have typically found that behavioral treatment alone is not sufficient for reducing sex offender recidivism (e.g., Quinsey & Marshall, 1983; Rice et al., 1991).

Throughout the 1970s and 1980s, theories of the etiology of sex offending were expanded to include cognitive processes as additional contributors to offending behavior (Marshall & Laws, 2003). Following this, new treatment components were added to incorporate these ideas. For example, Marshall (1971) proposed that in addition to deviant...
sexual arousal, many sexual offenders lack the social skills necessary to maintain adult relationships and recommended adding components such as reconditioning of appropriate sexual interests, social skills training, and assertiveness training, with the hope that the teaching of such skills will enable sex offenders to develop age-appropriate relationships and they will forego deviant sexual relationships as a result. In the 1980s, Abel and colleagues began to incorporate the role that distorted cognitions play in the justification and continuation of offending behavior into their theory of etiology, and recommended that treatment programs challenge these distortions in therapy (Abel, Mittelman, & Becker, 1983).

During this time, however, new treatment components were added that were not firmly rooted in any etiological theory of sexual offending. A prime example is the incorporation of relapse prevention (RP) techniques into sex offender treatment. RP was initially designed as a maintenance program for individuals who had completed treatment for drug or alcohol problems (Marlatt & Gordon, 1985). Researchers in the sex offender field quickly saw commonalities between addictive behaviors and sexual aggression, particularly in the characteristics and precursors of relapse, and proposed an adaptation of RP techniques for the treatment of sexual offending behavior (Pithers, Marques, Gibat, & Marlatt, 1983).

In the 20 years since its inception, RP has been incorporated into a majority of current sex offender treatment programs, with few changes to the original model (Laws, Hudson, & Ward, 2000). RP has been applied widely based on its face validity and clinically intuitive premises (Marshall & Anderson, 2000; Polaschek, 2001), yet little research has been conducted to test central elements of RP theory (Hanson, 2000). In fact, several research studies have produced findings that are contrary to the main tenets of RP theory and treatment (e.g., Hudson, Ward, & McCormack, 1999; Ward, Louden, Hudson, & Marshall, 1995). For example, RP assumes that sexual offending follows a predictable path in which covert planning and a series of seemingly irrelevant decisions set offenders up for high-risk situations (Pithers, 1990; Pithers et al., 1983). RP helps the offender identify the situations that place him at risk for reoffending and teaches him strategies to help him cope with these high-risk situations in order to help him gain control over his sexual behavior (Nelson, Miner, Marques, Russell, & Achterkirchen, 1989). While this makes intuitive sense given empirical findings that a significant proportion of sex offenders do not admit to explicit planning of their offenses (Marshall & Serrano, 2000), there was no literature specifically addressing the pathways to offending when the RP model was first developed, nor were these implicit pathways to offending evident in any etiological theories of the time.

In subsequent years, however, researchers have found that that there are multiple pathways to offending for both child molesters (Ward et al., 1995) and rapists (Polaschek, Hudson, Ward, & Siegert, 2001), including a pathway which features explicit offense planning based on positive mood and appetitive drives (Hudson et al., 1999). Newer iterations of RP models have yet to incorporate research findings of heterogeneous pathways to offending, despite the central role that discussion, anticipation, and avoidance of the theorized common offense pathway takes in RP treatment for sexual offenders.

1.2. Current treatment programs

Over the years, an expanded approach to treating sex offenders has gained popularity and presently a majority of sex offender treatment programs employ multi-component cognitive-behavioral therapy (CBT) that is either built upon or incorporates a relapse prevention framework (Marshall, Anderson et al., 1999). These multi-component approaches reflect more comprehensive theories of sexual offending which incorporate physiological, psychological, social, and environmental influences on the development and maintenance of sexual offending behaviors (e.g., Finkelhor, 1984; Hall & Hirschman, 1991; Marshall & Barbaree, 1990a). As such, treatments are extensive and target a wide variety of areas, including deviant sexual arousal, distorted cognitions, pro-offending attitudes, impulse control deficits, social skills deficits, poor emotion regulation, and environmental triggers, all of which are factors that are believed to contribute to sexual offending behavior.

Frequently used behavioral components include aversion therapy, covert sensitization, masturbatory reconditioning, and directed masturbation. Cognitive targets of treatment are both offense-specific and offense-related (Marshall, 1999). Offense-specific targets include overcoming denial and minimization, increasing victim empathy, challenging distorted attitudes and beliefs, modifying deviant fantasies, and establishing a relapse prevention plan (Marshall & Fernandez, 1998). Offense-related targets include teaching life skills, relationship skills and problem-solving skills, intimacy training, anger management, and substance abuse treatment (Marshall & Fernandez, 1998).
1.3. Treatment effectiveness

Although there are currently thousands of sex offender treatment programs in operation in North America (Knopp et al., 1992), the empirical literature is far from conclusive regarding the effectiveness of such programs for reducing sexual recidivism. Large-scale meta-analyses generally reveal modest treatment effects, particularly with the more modern CBT approaches. In their meta-analysis of 43 treatment outcome studies conducted since 1980, the Collaborative Outcome Data Project found that, averaged across all studies, the sex offense recidivism rate for treated offenders was 12.3% compared to 16.8% for the untreated comparison groups. When limiting the analysis to the more recent CBT programs, 9.9% of treated offenders sexually reoffended compared with 17.4% of non-treated offenders (Hanson et al., 2002). These findings replicated Hall's (1995) meta-analytic findings of a robust, albeit small effect of cognitive-behavioral treatment with sexual offenders, Gallagher, Wilson, Hirschfield, Coggeshall, and MacKenzie's (1999) findings of moderate effect sizes for CBT and RP programs, as well as findings of CBT effectiveness by independent researchers (e.g., Loomen, Abramson, & Nicholaichuk, 2000; McGrath, Hoke, & Vojtisek, 1998).

Other researchers, however, have produced evidence to support an argument that sex offender treatment programs are ineffective (e.g., Furby et al., 1989; Quinsey, Khanna, & Malcolm, 1998; Rice et al., 1991). Furthermore, the only large-scale, randomly controlled outcome study to date has recently found that incarcerated offenders undergoing a 3-year intensive CBT program within an RP framework did not differ from untreated volunteer controls in their rates of sexual recidivism (22% and 20%, respectively) or violent recidivism (16.2% and 11.6%, respectively) after an 8-year follow-up period (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005).

Overall, it seems apparent that a multi-component cognitive-behavioral approach is currently the best available treatment for sex offenders; however, given that between 10% and 30% of treated offenders sexually reoffend within 5 years of their release (Hanson et al., 2002; Marques et al., 2005), there is clearly room for improvement.

2. Theory of problem

We believe that a major reason current treatment programs yield only modest reductions in recidivism is because of significant problems in the theories of sexual offending upon which they are predicated. To begin, a comprehensive theory of the etiology of sex offending is lacking (Wood, Grossman, & Fichter, 2000). Current theories generally espouse the multi-causal nature of sexual offending (Becker & Murphy, 1998) and incorporate biological, developmental, behavioral, cognitive, and sociocultural explanations (e.g., Marshall & Barbaree, 1990a). Current treatment programs are then forced to target a huge number of areas to improve in offenders, which causes treatment to be extensive, time-consuming, and poorly integrated.

An analysis of the empirical basis of current theories should help to clarify those factors that are most in need of intervention, which should both streamline existing treatment programs and serve to increase treatment effectiveness by specifically targeting only the most relevant areas of intervention. Rather than reviewing each of the major etiological theories separately, we will limit our focus to those aspects that are common to all theories. Based on the available literature, we believe that difficulties with the current 'theories of problem' and the subsequent impact on treatment design are three-fold.

2.1. Treatment targets with a correlational basis

First, a majority of these theories are rooted in either clinical observations or empirical findings that are primarily correlational in nature. A large proportion of the research that informs etiological theories consists of studies that attempt to delineate the characteristics that are unique to sex offenders, as compared to other types of offenders and community samples, in an effort to uncover the factors that play a motivating role in sexual offending. However, the mere presence of unique features among sex offenders does not imply that they are causally related to offending behavior, and their inclusion in etiological theories may not be merited. Thus, treatment programs that are based on these theories of offending may be flawed in that they are pinpointing factors to be treated that may not be contributing to future sex offending.

For example, research has consistently found that child molesters exhibit social skill deficits when compared with general offenders and non-offender male comparison groups (e.g., Overholser & Beck, 1986; Segal & Marshall,
There is also evidence to suggest that rapists exhibit social skill deficits as well (Overholser & Beck, 1986), though some data indicate these deficits may not be specific to rapists but more characteristic of offenders in general (Stempac & Quinsey, 1986). Together, the above findings and associated research uncovering specific deficits among sex offenders in social decoding and the cognitive processing of social information (Stempac, Segal, & Gillis, 1999) have led theorists to posit that sex offenders' deficiencies in skills related to successful heterosocial behavior causes them to act in a sexually aggressive manner. Although this is a widespread belief, empirical research has not specifically addressed the causal relationship between social competence and sexual offending (Geer, Estupinan, & Manguno-Mire, 2000). In addition, research examining risk factors for recidivism has consistently failed to find a relationship between low social skills and sexual recidivism (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004; Prentky, Knight, & Lee, 1997), suggesting that social skill deficits may not contribute to sexual offending, despite their presence in sex offender samples. Regardless of these findings, a majority of current sex offender treatment programs incorporate social skills training as an element of treatment (Knopp et al., 1992; Mulloy & Marshall, 1999). Before we implement treatments designed to enhance the social skills of sex offenders, we need to establish that these social skill deficits precede and somehow facilitate sexually deviant acts, and rule out the possibility that limited social skills are a result of offending, or are otherwise unrelated to offending despite their presence in sex offender samples.

Likewise, factors that are not unique to sexual offenders may play a causal role in sexual offending behavior (Marshall, Laws, & Barbaree, 1990), thus etiological theories primarily based on correlational studies of characteristics distinctive to sex offenders may be incomplete. Research with general offenders has uncovered a number of risk factors related to persistent criminal behavior, such as young age, unstable employment records, alcohol and drug abuse, protocriminal attitudes, and social interaction with other criminals (Gerdeau, Little, & Goggin, 1996). These characteristics are considered to define a general criminal lifestyle or antisocial orientation (Hanson & Bussiere, 1998). Not surprisingly, sexual offenders typically display many of these same features (e.g., Simoa, Sales, Kasznia, & Kahn, 1992; Weinrott & Saylor, 1991), particularly rapists (Pollaschek, Ward, & Hudson, 1997). Furthermore, the presence of an antisocial orientation has been linked to both sexual and non-sexual recidivism in studies of the risk factors for reoffending in sex offender samples (Hanson & Bussiere, 1998; Hanson & Harris, 2000; Hanson & Morton-Bourgon, 2004). Such findings suggest that these more general antisocial characteristics should play a larger role in theories of the etiology of sexual offending, and a greater focus on these factors in treatment may increase the effectiveness of treatment programs (Andrews & Bonta, 2003).

Overall, the empirical literature illustrates that theories limited to correlational research examining characteristics specific to sex offenders are inadequate for fully explaining the development and maintenance of sexually deviant behavior. Subsequently, treatment programs informed by these theories may be overlooking factors that are directly influencing recidivism, while at the same time erroneously targeting factors that may be unrelated to deviant sexual behavior.

2.2. Treatment targets with no empirical basis

Second, although current etiological theories provide comprehensive and intuitively appealing frameworks describing the development of sexual offending behavior, elements of these theories have yet to be supported by any type of empirical evidence. All of the factors theorized to be related to offending behavior need to be systematically researched to determine both their presence in sex offender samples and the nature of their relationship to sexual offending before we implement expensive, time-consuming, and often mandatory treatment programs to target them.

As discussed above, a review of the literature has revealed that despite their presence in sex offender populations, several of the main targets of treatment have not yet been established as causal factors in the sexual offense chain. But what is more troubling is that some of the characteristics that are specifically targeted in treatment have not even been found to exist in a substantial proportion of convicted sex offenders. For example, despite the pervasive assumption in the field that sexual offenders engage in extensive planning of their offenses and that they fantasize about their future deviant acts, research has found that less than half of offenders admit to pre-offense planning or fantasizing (Marshall & Serran, 2000). It is possible that offenders are not being truthful about the extent of their offense planning given their tendency to deny or minimize their sexually deviant behaviors (e.g., Barbaree, 1991) and distort the truth in other areas (Laws & O'Donohue, 1997). However, offenders have
been surprisingly forthcoming regarding their deviant behaviors and fantasies when assured confidentiality (Abel et al., 1987; Weinrott & Saylor, 1991). Moreover, there is reason to believe that a proportion of sexual offending may truly be impulsive (Hanson, 2000; Kirsch, Becker, & Figueredo, 2004) given the link between impulsivity and general offending behavior (Gottfredson & Hirschi, 1990) and the similarities between sexual and general offenders (e.g., Polaschek et al., 1997; Simon et al., 1992; Weinrott & Saylor, 1991). Thus, the widespread use of techniques expressly aimed at identifying and reducing pre-offense planning and fantasy may not be appropriate for a portion of clients receiving this treatment. Further empirical work investigating the existence of planning and fantasizing among sex offenders and the relationship between these behaviors and offending is necessary before our treatment programs incorporate strategies to reduce or eliminate them.

Another example of a disparity between etiological theory and empirical support is the notion of empathy deficits among sexual offenders. The view that sex offenders generally lack the capacity to experience empathy pervades the literature (Geer et al., 2000), and this deficit is believed to be a critical characteristic of sex offenders (Marshall, Hudson, Jones, & Fernandez, 1995). Prominent theories of sexual offending posit that the inability to be empathic towards others, particularly women and children, allows sex offenders to commit their abusive acts (e.g., Finkelhor & Lewis, 1988; Marshall & Barbaree, 1990a). As a result, empathy training is seen as an essential component of treatment, with 95% of North American adult treatment programs employing some form of empathy training (Knopp et al., 1992).

Although empathy training has been incorporated into treatment programs since the 1980s, research examining the nature and extent of the deficit did not begin until the 1990s (Marshall et al., 1995). Moreover, research that has been conducted to date has failed to find clear-cut evidence for general trait-based deficits in empathy among sex offenders (Geer et al., 2000), with a number of studies providing evidence of no differences between sex offenders, general offenders, and non-offenders on general measures of empathy (e.g., Hoppe & Singer, 1976; Langevin, Wright, & Handy, 1988). More recent studies have attempted to examine situation and person-specific empathy deficits among sex offenders (Marshall et al., 1995) and to distinguish sex offenders' ability to both recognize harm as well as experience personal distress resulting from this recognition (Marshall, Hamilton, & Fernandez, 2001). A recent study found evidence of cognitive (or recognition) empathy deficits in child molesters for their own victims, and to a lesser degree, other victims of child sexual abuse, but not to child car accident victims when compared to non-offender community members (Marshall et al., 2001). That is, sexual offenders were less able to recognize sexual abuse victim harm than community members, though they showed no differences with respect to feelings of concern or compassion for both child accident and sexual abuse victims once harm was recognized. These findings led Marshall et al. (2001) to conclude that empathy deficits are not global as once believed, but appear to be specific to an offender's own victim, or to a class of individuals who are potential victims. These victim-specific cognitive empathy deficits may not be the result of general deficits in their ability to experience empathy, but merely extensions of the cognitive distortions that are characteristic of sex offenders (e.g., Abel et al., 1985; Ward, Hudson, Johnston, & Marshall, 1997), and thus, deliberate attempts by the offenders to withhold empathic responding towards their victim in order to minimize their acknowledgment of causing them harm (Marshall, Anderson et al., 1999).

The above conceptualization calls into question the popular theory that empathy deficits are driving offending behavior, and instead fosters the idea that empathy deficits may be after-the-fact rationalizations that enable offenders to justify their offenses and thus, allow them to continue these behaviors in the future (Abel et al., 1989). However, studies of risk factors for sexual recidivism have failed to provide any evidence of a relationship between victim empathy and sexual reoffending (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004), implying that these specific empathy deficits may not necessarily play a role in the maintenance of sexually abusive acts. It is also possible that victim-specific empathy deficits are created by sex offenders to help allay the negative affect that often occurs following engaging in sexually deviant behaviors, but are not causally related to future offending in any way; more research is clearly needed to determine the nature of the relationship between specific empathy deficits and sexual offending. Regardless, the above findings challenge the current practice of victim empathy training within sexual offender treatment programs. If offenders do not exhibit global empathy deficits, but are instead purposefully minimizing recognition of victim harm, then treatment approaches aimed at enhancing empathy among sex offenders are inappropriate and possibly unnecessary for reducing future deviant sexual behavior.

Overall, more research needs to be conducted to assess the nature of characteristics or deficits assumed to occur in sex offenders and, if they are found to exist, to establish the temporal sequence of events in order to inform treatment programs as to the areas of intervention that are most directly related to future sexual offending.
2.3. Initiating versus maintaining factors

Finally, although current theories of sexual offending suggest that factors influencing sexually deviant acts include a combination of etiological and maintaining processes (Marshall et al., 1990), little work has been conducted to tease these processes apart. Factors associated with the initiation of sexual offending may not be the same as those that maintain it (Hanson & Morton-Bourgon, 2004). As such, although theories outlining the factors associated with the development of sexually deviant behavior are essential for gaining a better understanding of the nature of the behavior and for providing hypotheses to empirically examine, they are not appropriate as the sole informants of treatment approaches. Treatment programs are primarily focused on treating individuals who have already committed a sexual offense, and thus have the specific goal of preventing future sexual offending by these individuals. Therefore, aspects of theories explaining the initiation of sexual offending are less relevant, while aspects of theories explaining maintenance of sexual offending behavior will be more instructive for treatment programs, since they can inform us about the factors that are most directly related to recidivism.

Evidence for the necessity of differentiating between initiating and maintaining factors comes from research reviewing the risk factors associated with recidivism. For example, although a disproportionate number of child molesters report being physically or sexually abused as children (Marshall, 1997a) and a number of theories maintain that these negative childhood experiences are a causal link in the sexual offending chain (e.g., Becker & Kaplan, 1988; Finkelhor, 1984; Hall & Hirschkran, 1991; Marshall & Barbaree, 1990a), childhood physical and sexual abuse has not been found to be related to sexual recidivism in recent meta-analytic studies (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004). This does not imply that negative childhood experiences are unrelated to the development of sexually deviant behavior (although a causal relationship still requires empirical validation), it simply means that these experiences likely do not serve to maintain such behavior.

Another feature that may be involved with the development but not maintenance of sexually deviant behavior is low self-esteem. Numerous studies have found sex offenders to report lower levels of self-esteem than non-sexual offenders and men in the community (e.g., Fisher, Beech, & Browne, 1999; Marshall, Cripps, Anderson, & Cortoni, 1999). Prominent theories of sex offending incorporated these findings into their models of the development of sexually deviant interests and behaviors. Such models posit that feelings of low self-esteem and sexual inadequacy may prevent adolescent boys from being able to develop normal sexual relationships with female peers, and they may then turn to aggressive sex acts with children as a way to regain their sense of masculinity (Marshall, Anderson, & Champagne, 1997; Marshall & Barbaree, 1990a). While this model makes intuitive sense, a causal relationship has yet to be empirically validated.

More work has been conducted with respect to self-esteem’s role in the maintenance of sexual offending. A recent study found low levels of self-esteem prior to treatment to be predictive of post-treatment sexual recidivism in both incarcerated and community samples of sex offenders (Thornon, Beech, & Marshall, 2004). However, the study suffers from two major methodological flaws. First, the study utilized an unpublished, and therefore, non-validated self-report measure of self-esteem as its main predictive variable, which calls into question the validity of the self-esteem scores used in their analyses. Second, the authors failed to control for a number of variables that have been found to be related to sexual recidivism, such as age (e.g., Hanson, 2002), prior criminal history (e.g., Hall & Proctor, 1987), marital status (e.g., Rice et al., 1991), treatment completion status (e.g., Hanson et al., 2002; Marques et al., 2005), and deviant sexual preferences (e.g., Quinsey, Rice, & Harris, 1995), among others (see Harris & Hanson, 2004 for a recent meta-analysis). Such factors can conceivably be related to self-esteem, and thus may be contributing to the relationship found in the study. Meta-analytic studies of risk factors for recidivism have failed to find a relationship between low self-esteem and sexual recidivism among convicted sex offender samples (Hanson & Morton-Bourgon, 2004). Thus, while low self-esteem may contribute to the initiation of sexually aggressive behaviors, evidence is limited for its role in the maintenance of such behaviors, suggesting that it may not be a suitable target of treatment programs aimed at reducing the sexual recidivism of convicted sex offenders.

In conclusion, it is possible that some factors, like antisocial lifestyle, play a role in both the development and maintenance of sexually deviant acts, therefore, treatments designed to alter these factors should be useful for reducing recidivism behavior. But it is also likely that, like child abuse, many factors that contribute to the initiation of deviant sexual behaviors may not be relevant to future recidivism (Hanson & Morton-Bourgon, 2004), and as such, should not be a central focus of treatment programs for convicted sex offenders. More work delineating the
initiating and maintaining factors in sexual offending is clearly needed in order to inform treatment programs as to the most useful targets for change.

2.4. Summary

There are several problems with current theories of sexual offending, and as a result, the treatment programs that are established upon these theories. The problems outlined above stem from a disparity between theories of sexual offending and empirical work that addresses the components of such theories. As a result, treatment programs may be misappropriating resources to factors that have not been empirically validated as related to sexual offending or reoffending. Perhaps, a greater emphasis on conducting empirical research to test current conceptualizations of the etiology and maintenance of sexual offending and modifications to our theories to incorporate such findings can have direct implications on the related treatment targets and subsequently, on overall treatment effectiveness.

3. Theory of change

Apart from the aforementioned difficulties inherent in current treatment approaches due to their reliance on faulty ‘theories of problem,’ sex offender treatment programs exhibit problems in other areas as well. These flaws exist because treatment must not only rely on etiological theories to inform them of the areas most in need of change, but must also depend on theories of treatment delivery to inform them of the methods most appropriate for enacting these changes. Unfortunately, theories of treatment delivery in the sex offender arena do not appear to be based upon, or validated by, empirical findings. Below, we will outline three main problems that we believe result from disparities between these ‘theories of change’ and the relevant empirical literature.

3.1. Methods of treatment delivery

First, theories of treatment delivery seem to disregard the research that speaks to the applicability of specific therapeutic processes and approaches for sex offenders, and treatment programs appear to be designed and implemented without taking this empirical work into account. Current methods of treatment delivery instead seem to be based upon intuitive judgments of their suitability and lack outcome data to support their use.

For instance, the literature clearly demonstrates that there is considerable heterogeneity in the expression of sexual aggression, as well as in the motivational factors underlying the behavior (Hall & Hirschman, 1991). Researchers have consistently found differences between rapists, extramarital child molesters, and incest offenders in a variety of areas, including patterns of deviant arousal (e.g., Baxter, Marshall, Barbarree, Davidson, & Malcolm, 1984), number of paraphilic diagnoses and acts (e.g., Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988), age at first offense (e.g., Bard et al., 1987; Baxter et al., 1984), number of sexual and non-sexual offenses in their criminal histories (e.g., Weinrott & Saylor, 1991), the nature and extent of cognitive distortions (e.g., Ward et al., 1997), pathways to offending (e.g., Polaschek et al., 2001; Ward et al., 1995), and rates of recidivism (e.g., Hanson & Bussiere, 1998, Harris & Hanson, 2004). Etiological theories of sexual offending typically distinguish between incest offenders, child molesters, and rapists given these differences, yet treatment programs continue to ignore these findings and adopt methods of treatment that render it difficult, if not impossible, to take offender heterogeneity into account.

For example, treatments are predominantly provided in a group format (ATSA, 2005; Knopp et al., 1992). These group interventions provide treatment that is essentially the same for all members, which limits a clinician’s ability to modify treatment or provide individualized therapy that is geared towards an offender’s unique needs (Marques et al., 2005). In addition, sex offender treatment groups are typically quite diverse with respect to membership (Marshall, Anderson et al., 1999); this diversity further interferes with necessary treatment modifications, such as adjusting RP techniques to accommodate men with varying pathways to offending (Marques et al., 2005).

Clinicians and researchers have argued that group treatments are both more efficient and more effective than individual therapy (Marshall, Anderson et al., 1999), and provide sound reasons to justify this assertion (e.g., Beech & Fordham, 1997; Marshall & Barbaree, 1990b). What they do not provide, however, are outcome studies comparing the effectiveness of multi-component CBT programs in a group format to similar programs providing more individualized treatment. The literature that does exist shows that comprehensive CBT approaches yield differential
effectiveness both across sex offender subtypes (e.g., Marques, 1999; Marshall, Jones, Ward, Johnston, & Barbaree, 1991), and within subtypes (e.g., Malecky, 1993). These differences in treatment effectiveness suggest that aspects of current treatment programs are not appropriate for sex offenders as a whole, and imply that treatments may need to be tailored for specific types of offenders. As such, implementing treatment to groups of rapists, child molesters, and incest offenders simultaneously may not be the best course of action, given that it is not well matched to each offender's individual needs.

Another example of empirical findings that are not consistently being incorporated into sex offender treatment relates to therapeutic process variables. The general clinical literature has examined the influence that therapist characteristics have upon the therapeutic relationship and subsequent treatment efficacy and has found the therapist–client alliance to account for approximately 25% of the variance in treatment outcome (e.g., Morgan, Luborsky, Crist-Cristoph, Curtis, & Solomon, 1982). More recently, this work has been extended to CBT approaches with similar results (Schaap, Bennet, Schindler, & Hoogduin, 1993, as cited in Marshall et al., 2003). This research, coupled with findings that particular treatment techniques account for only small proportions of the variance in treatment outcome (e.g., Luborsky et al., 2002), has led some researchers to posit that the process of therapy may be more important than any specific therapeutic technique (Messer & Wampold, 2002). Sex offender treatment programs, however, appear to be more focused on employing specific techniques, and attribute less import to the manner by which these treatments are delivered (Marshall et al., 2003).

Specifically, the therapeutic process literature has found therapist empathy, warmth, support, and flexibility to be factors that influence a positive therapeutic alliance and thus, facilitate more client change (Miller, 2000), while therapists who are confrontational, judgmental, and/or critical have been associated with negative effects on client engagement and treatment effectiveness in both clinical and sex offender populations (Beech & Fordham, 1997; Marshall et al., 2003; Miller, 2000). These findings can have significant implications for the format of sex offender treatment, given that a majority of treatment programs view the clinician's role as a confrontational and challenging one, whereby therapists seek to reduce offenders' denial and minimization of their crimes, as well as alter the cognitive distortions that are thought to lead to sexual offending behaviors. In fact, some researchers suggest that using a confrontational stance is the only way to work with sex offenders (Salter, 1988).

This is a particularly troubling practice in the sex offender domain, given that researchers examining therapeutic processes for clients in different stages of change contend that therapeutic confrontation may be particularly harmful to those individuals in the precontemplation stage of change (DiClemente & Velasquez, 2002), a stage that frequently characterizes sex offenders, who are often unmotivated or ambivalent about changing their behavior (Ginsburg, Mann, Rotgers, & Weckes, 2002).

The general clinical literature suggests that increasing therapist empathy, warmth, and flexibility and reducing confrontation may help to enhance the therapeutic alliance, which may serve to both reduce dropout rates, which has been associated with increased risk of recidivism (e.g., Hanson et al., 2002; Marques et al., 2005) and increase overall treatment effectiveness (Luborsky, McLellan, Dugter, Woody, & Seligman, 1997). In light of this evidence and findings that confrontational and over-controlling therapists have detrimental effects on treatment progress for groups of sex offenders (Beech & Fordham, 1997), Marshall et al. (2003) advocate for firm, but supportive, challenging as opposed to aggressive confrontation with sexual offenders, but it is unknown how many programs besides their own (Marshall, Anderson et al., 1999) actually adhere to this practice.

Current treatment programs that continue to use confrontational approaches to challenge denial, minimization, and cognitive distortions, among other things, are overlooking the available research and quite possibly producing iatrogenic effects as a result. However, more research needs to be conducted to assess the applicability of these findings to sex offender populations, to ensure that these findings from the general clinical literature are generalizable to this more specialized group of clients.

3.2. Obstacles to treatment

Second, in addition to focusing treatment on the characteristics thought to be related to sexual recidivism, treatment programs also target factors that are believed to affect an offender's progress in therapy. While it seems sensible to presume that enhancing the features related to greater success in treatment will lead to lower sexual recidivism rates, this supposition has yet to be empirically examined. Moreover, several of the factors thought to
directly influence treatment progress and therapeutic success have only limited evidence to support such a relationship.

A prime example is a focus by clinicians on reducing an offender’s denial and minimization of his sexual crimes. Denial and minimization of sexual offending behaviors have been found to occur in a substantial proportion of convicted sex offenders (Barbaree, 1991; Marshall, Anderson et al., 1999) and it is frequently believed that such distortions compromise the accuracy of the assessment and treatment of offenders (Barbaree, 1991). As such, many theories of treatment maintain that an offender cannot progress in treatment unless he can fully disclose the details of his crime and recognize his offense precursors in order to construct a relapse prevention plan (Pithers, 1990). This has led the premier professional organization in the field of sexual offender research and treatment, the Association for the Treatment of Sexual Offenders (ATSA), to view denial as an obstacle to treatment progress (ATSA, 2005) and a vast majority of sex offender treatment programs to consider overcoming denial and minimization as an essential component of treatment (Marshall, Anderson et al., 1999).

In order to validate this practice, research needs to assess whether individuals who reduce their denial and minimization of prior offenses both: (a) show greater benefits from other aspects of treatment as a result, and (b) exhibit lower rates of sexual recidivism due to these changes. Research investigating the effectiveness of challenging denial and minimization has found such approaches to be successful in increasing admissions of responsibility (Barbaree, 1991; Marshall, 1994) as well as increasing motivation for treatment (Barbaree, 1991). In a recent study, Levenson and Macgowen (2004) found denial to be negatively correlated with engagement in treatment and treatment progress as rated by clinicians, providing preliminary support for the notion that a reduction in denial is necessary for treatment progress. However, no work has been conducted to date to determine whether treatment progress resulting from a greater acceptance of responsibility for one’s criminal acts is related to overall treatment success, and accordingly, lower sexual recidivism after completion of treatment. Results from meta-analytic studies of both treated and untreated offender samples have failed to show a relationship between denial and minimization of sexual offenses and sexual recidivism (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004), calling into question the necessity of including the challenging denial and minimization as a major focus of treatment. In a recent update to their practice standards and guidelines for practitioners, ATSA tempered their recommendations for working with denial by eliminating the directive that “increasing client acceptance of responsibility...should be a treatment goal” (ATSA, 2001, p. 20) to a more general recommendation that clinicians “should support clients in being honest about all aspects of their history and functioning” (ATSA, 2005, p. 20). This change sends a message to clinicians in the field that perhaps reductions in denial and minimization are not as critical as once believed. More work is clearly needed in order to determine the benefits of targeting this area, the most appropriate methods by which to do so, and the effects that such improvements will have on overall treatment effectiveness.

3.3. Effectiveness of treatment methods

Finally, the available outcome literature is currently inadequate for informing us how to design the most effective and efficient methods for reducing sexual recidivism. The primary means by which treatment programs are evaluated is a comparison of recidivism rates for treated versus untreated offenders (Barker, 1993). While this can speak to overall treatment success, it does not give us information about the effectiveness of particular components of treatment, nor does it allow us to ascertain which of the features of treatment are mediating reductions in sexual recidivism. Without this knowledge, we are unable to determine those aspects of therapy that are essential for positive treatment outcome and those that are superfluous.

In order to acquire the information essential for devising better treatment programs, we first need to evaluate the different components of treatment. Such evaluations should assess whether each component of treatment: (a) achieves its desired goal, (b) is necessary for the achievement of that goal, and (c) brings about reductions in recidivism as a result (Marshall & Serran, 2000). To assess whether components of treatment are achieving their goals, pre- and post-treatment levels of their intended targets need to be measured and compared. Some work has been conducted in this regard; for example, techniques aimed at reducing denial and minimization of sexual offenses have been associated with greater acceptance of responsibility among treated offenders (Barbaree, 1991; Marshall, 1994). Similar results have been found with respect to empathy training (Pithers, 1999) and procedures designed to enhance self-esteem (Marshall, Champagne, Sturgeon, & Bryce, 1997). However, researchers have
failed to examine the necessity of the specific techniques aimed at challenging denial and minimization, enhancing victim empathy, and increasing self-esteem for producing the aforementioned improvements, nor have they examined whether changes in these variables are related to reductions in future sexual offending. Such work can help to clarify the relationship that such variables have with sexual offending, as well as delineate the mechanisms by which positive treatment outcomes are made.

One component of treatment for which researchers have examined all three of the above questions is that of behavioral techniques aimed at reducing deviant sexual arousal. The literature shows that biofeedback paired with aversion therapy using electric shocks is generally effective for reducing deviant sexual arousal in convicted child molesters, as measured by penile plethysmograph (Quinsey et al., 1980), suggesting that it is achieving its desired goal. However, empirical work addressing the latter two questions regarding both the necessity of these behavioral interventions and their impact on reducing sexual recidivism is more discouraging. Marshall (1997b) found that reductions in deviant sexual arousal could be accomplished in the absence of behavior modification techniques, suggesting that behavioral techniques may not be required, given that other components of treatment can produce similar results. Moreover, Rice et al. (1991) found that nonfamilial child molesters who showed significant decreases in deviant sexual preferences following biofeedback and/or aversion therapy were no less likely to recidivate than both child molesters who did not show such treatment gains and non-treated controls, indicating that although aversion therapy proved effective in reducing deviant arousal, these changes were not sufficient to reduce sexual recidivism.

Deviant sexual preferences have consistently been found to be predictors of sexual recidivism (Hanson & Bussiere, 1998; Hanson & Harris, 2000; Hanson & Morton-Bourgon, 2004), and as such, are a clear target for treatment. However, empirical findings in the area provide a murky picture of the current treatment methods for reducing deviant sexual arousal and their subsequent impact on sexual recidivism. On the whole, research indicates that while behavioral techniques aimed at modifying deviant sexual preferences are effective, they may not be necessary or sufficient to reduce sexual recidivism. Treatment programs need to incorporate these findings into their conceptions of treatment and researchers need to develop and study different or additional methods of reducing deviant arousal that can lead to greater reductions in recidivism.

Overall, researchers need to conduct more extensive outcome research to evaluate the effectiveness, necessity, and sufficiency of their individual treatment components, instead of simply relying on rates of recidivism as their measure of therapeutic effectiveness. This additional data will be helpful for informing the clinical community as to the components that are essential for producing positive treatment outcomes and reducing recidivism, and should serve to improve and streamline sex offender treatment as a result.

3.4. Summary

Scant attention has been paid to the process of therapy within sex offender treatment programs, and what evidence does exist suggests that this lack of knowledge may have detrimental effects on treatment outcome. Additional empirical work also needs to be conducted to assess the necessity of incorporating treatment components to target areas thought to be related to treatment progress and to evaluate both the necessity and effectiveness of current methods undertaken to enact change in areas related to sexual recidivism. Perhaps a greater emphasis on evaluating current treatment practices can provide us with the information we require in order to implement more efficient and effective treatment programs.

4. Recommendations for future research

Thus far, we have outlined a number of disparities between the relevant sex offender literature and current theory and practice in the field. Throughout the paper, we have made recommendations for future empirical work with respect to particular aspects of etiological theory and methods of treatment delivery. In addition to those suggestions, we believe that the field of sex offender treatment can be benefited by work in several other areas as well.

First, the empirical literature on risk factors for recidivism has largely been ignored. These studies have consistently found antisocial lifestyle and deviant sexual interests to be the largest predictors of sexual recidivism, while factors related to clinical presentation (low remorse, denial of crime, low victim empathy) and psychological maladjustment (depression, anxiety, low self-esteem) appear to be unrelated to sexual
reoffending (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004). These results suggest that greater attention to characteristics associated with an antisocial orientation and antisocial lifestyle will be beneficial for reducing sexual recidivism. This notion has been supported in social psychological theory of crime, which suggests that targeting needs related to criminality, such as pro-criminal attitudes, criminal associates, and unstable lifestyle, will enhance treatment effectiveness (Bonta, Law, & Hanson, 1998). Despite these findings, treatment programs continue to focus on enhancing psychological adjustment and working with features of clinical presentation, while devoting considerably less attention to characteristics associated with antisocial orientation and general criminal lifestyle.

Second, while research examining the risk factors for recidivism is highly informative, it is not comprehensive. To begin, the available literature only speaks to the individual effect each risk factor has on recidivism, but given the multidimensional nature of sexual offending, it is more likely a confluence of factors that contributes to offending behavior. Research needs to be conducted to look for these multiplicative relationships and treatment outcome studies need to analyze their data with such interaction effects in mind.

Moreover, a majority of the work conducted to date has focused on static or stable risk factors as long-term predictors of recidivism, such as demographic characteristics, criminal history, and personality traits (Hanson & Bussiere, 1998; Hanson & Harris, 2000). Researchers in the area have only recently begun to address dynamic risk factors, those factors that have the potential of changing, and when changed, are associated with changes in risk of recidivism (Hanson, 1998; Hanson & Harris, 2001). Dynamic risk factors may be more appropriate targets of treatment, given their greater amenability to change than static factors. Empirical work aimed at identifying those dynamic factors that significantly predict sexual recidivism will be invaluable for informing treatment programs of additional targets for change, and hopefully will increase treatment effectiveness as a result.

Furthermore, although knowledge of risk factors to sexual recidivism is necessary to guide treatment programs, it is not sufficient. More information regarding the relationship between specific risk factors and sexual reoffending both within and across individuals is needed to help determine the best methods of intervention. One way to accomplish this is by testing for mediators and moderators of change. Mediators are those processes through which change occurs, while moderators are those characteristics that affect the extent to which changes occur (Baron & Kenny, 1986). In order to create more effective treatments, we need to determine the mechanisms of change that produce reductions in sexual recidivism. Understanding why treatment works can help to maximize treatment effects by ensuring that the critical ingredients of treatment are included, and can help us to identify those variables upon which the effectiveness of a treatment might depend (Kazdin & Nock, 2003). An identification of moderating variables is also important in the sex offender domain, given the large degree of heterogeneity within this population. Knowledge of client characteristics that enhance or diminish treatment effectiveness will enable us to develop treatments that are better tailored to specific subtypes of offenders.

Third, in the field of sex offender treatment, there appears to be an assumption of a dose–response relationship between treatment and outcome; in other words, that treatment effectiveness is enhanced by employing more intensive and extensive treatments (Marshall & Serran, 2000), which results in some offenders spending up to 3 years in intensive inpatient treatment programs (Fernandez & Marshall, 2000; Marques et al., 2005). Research in the area of substance abuse treatment shows that length of treatment is not associated with treatment outcome (Miller & Brown, 1997). Given that sex offender treatment has been modeled after substance abuse treatment in other ways (George & Marlatt, 1989; Pithers et al., 1983), it may be worthwhile to assess the necessity of our currently lengthy treatment programs. Marshall and Serran’s (2000) findings that two relatively short-term treatment programs yielded significant reductions in recidivism, and data from the Collaborative Outcome Data Project showing outpatient community treatment to be equally effective to inpatient treatments (Hanson et al., 2002), both lend preliminary support to the notion that more does not always mean better. Additional work is needed comparing longer and shorter duration treatment programs to determine the minimum length of treatment that is necessary in order to achieve significant reductions in recidivism.

Finally, sex offender treatment programs may benefit from applying empirical findings from other areas of psychology to treatment techniques with sex offenders. For example, the social psychology literature has found that approach goals enhance performance while avoidance goals are associated with lower performance and motivation (Elliot & Church, 1997). Such findings have led some theorists to suggest that clients are more likely to actively participate in treatments employing approach goals as opposed to avoidance goals (Marshall et al., 2003). Current RP-based programs focus their efforts on establishing goals that involve the avoidance of behaviors (e.g.
identifying ways to avoid high-risk situations), while significantly less attention is given to creating positive goals, such as working to engage in prosocial behaviors (Marshall et al., 2003). Gaining a better balance between approach and avoidance goals may increase treatment participation and hopefully treatment effectiveness.

Another area of the general clinical literature which may prove relevant for sex offenders is treatment dropout and motivation for treatment. The sex offender literature has consistently found treatment dropouts to be at higher risk for sexual reoffending than treatment completers (e.g., Hanson et al., 2002; Marques et al., 2005). As such, it is crucial that we design treatment programs that demonstrate low rates of attrition. Given that low motivation for change has been associated with treatment dropout (Ginsburg et al., 2002), it is particularly important to work with sex offenders to get them more motivated to change their offending behaviors. Research in the field of substance abuse treatment has indicated that motivational interviewing has positive effects on increasing motivation for change in resistant or ambivalent clients (see Burke, Arkowitz, & Dunn, 2002 for a review). The above evidence has led some researchers to suggest that motivational interviewing techniques would be appropriate for use with sex offender populations (Garland & Dougher, 1991; Ginsburg et al., 2002), in the hopes that these techniques will increase motivation in ambivalent clients and subsequently reduce rates of attrition.

Overall, the field of sexual offender treatment is rife with unanswered questions and hence, burgeoning with research possibilities. Empirical work guided by updated theories of problem and theories of change should provide us with the information we so desperately require in order to improve our current methods of intervention with sex offenders.

5. Conclusion

In conclusion, we recommend that sex offender theory and treatment be guided by empirical evidence to a greater extent and call for research that can address the shortcomings of our current treatment approaches. More empirical work is needed to validate existing theories of the development and maintenance of sexual offending behavior, so that treatment programs predicated on these theories can concentrate their efforts on only the most relevant areas of intervention. In addition, a greater emphasis on the process of treatment delivery, research addressing the effectiveness and necessity of current methods of treatment delivery, and outcome studies investigating individual components of treatment will help advance the field of sex offender treatment by increasing treatment efficiency. Overall, more targeted research in the field sexual offending will help us design more optimal treatment programs, which will ultimately lead to increased treatment effectiveness and reductions in sexual reoffending as a result.

References


