

Implications of our Developing Understanding of Risk and Protective Factors in the Treatment of Adult Male Sexual Offenders

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Abstract

This paper summarizes our developing knowledge of factors that contribute added risk of sexual recidivism (risk factors) and factors that are associated with a reduced risk of sexual recidivism (protective factors). Specific implications for the design of future treatment programs are drawn. This information is contrasted with the common foci of sexual offender treatment programs that were designed before these research findings emerged, and suggestions made about how common clinical tasks might be re-visited and revised in the light of this new knowledge.

Keywords

Criminogenic need, sexual risk factors, protective factor, sexual offender treatment, sex offenders

Sexual offender treatment had firmly evolved as a specialty by the mid 1990s, so much so that it was possible for Hanson et al. (2002) in their review of evaluations of sexual offender treatment to distinguish “modern” forms of treatment, which were deemed to be somewhat effective, from older forms of treatment, which were deemed ineffective. Common elements of treatment regarded as “modern” around that time included the use of cognitive-behavioral methods and clinical tasks such as: (a) eliciting accounts of past deviancy and offending, (b) challenging denial and self-serving cognitive distortions, (c) developing empathy for victims, (d) analyzing past offenses to identify offense precursors, (e) developing a relapse prevention plan designed to be relevant to the identified offense-precursors, and (f) rehearsing skills for putting this plan into practice. More developed programs might also have included behavior therapy designed to modify offense-related sexual arousal patterns and anger management.

This paradigm for treatment was evolved prior to the completion of much foundational research into the treatment of sexual offenders, so it relied heavily on the clinical common sense of practitioners combined with some borrowing of ideas that were then current in related fields like substance abuse treatment. However, since around 2000, there have been a number of seminal developments. First, Hanson, Bourgon, Helmus, and Hodgson (2009) demonstrated that the Risk-Need-Responsivity (RNR) model (Andrews & Bonta, 2006) was applicable to sexual offender treatment. As is widely known, the RNR model indicates that treatment will be more effective if it is concentrated on medium and higher risk offenders (Risk principle), if it seeks to address factors that are linked to recidivism (Need principle), and if therapeutic methods and therapist behaviors are responsive to the learning style of the individual being treated (Responsivity principle).

The second seminal development was the demonstration by Marshall and colleagues (Marshall et al.,

2002; Marshall et al., 2003a; Marshall et al., 2003b) that much of what is known about effective therapist style in general psychotherapy also applies to the treatment of sexual offenders. This finding will hardly surprise anyone grounded in general psychotherapy, but it was startling to many of those within the field since a more aggressively confrontational style had formerly been seen as required for this “special” population. Marshall et al.’s findings provided important information about how the Responsivity principle could be met. The third seminal development has been a series of studies empirically identifying psychological risk factors for sexual recidivism (Mann, Hanson, & Thornton, 2010). Finally, the fourth seminal development, still in its earliest stages, is the identification of factors that protect against sexual recidivism (e.g., de Vogel, de Ruiter, Bouman, & de Vries Robbé, 2012; Griffin, Beech, Print, Bradshaw, & Quayle 2008).

The focus of this paper addresses and articulates the implications of these latter two developments in terms of how the Need principle should be applied in sexual offender treatment.

■ Psychological Risk Factors

Mann et al.’s (2010) paper uses meta-analyses to summarize the results of recidivism studies that seek to relate psychologically meaningful factors to sexual recidivism. They place the factors studied into one of the following categories: empirically supported, promising, unsupported overall but with interesting exceptions, worth exploring, or factors with little or no relationship to recidivism. A limitation of their paper is that factors are considered one at a time without integrating them into broader categories that might show more general patterns in the data. Accordingly, the Mann et al. results are re-organized here using an updated version of the Structured Risk Assessment (Thornton, 2002) need framework. The result is shown in table 1, which also draws on the earlier, more limited Hanson and Bussiere (1998) meta-analysis and the more specialized and recent Helmus, Hanson, Babchishin, and Mann (2013) meta-analysis. Relevant results from all three meta-analyses are described using the

broad categories of degree of support employed by Mann et al.

The RNR Need principle implies that the effectiveness of treatment will be enhanced by systematically assessing for those kinds of psychological factors that have been empirically identified as related to recidivism and then concentrating treatment efforts on them. To make it easier to apply this idea the overall patterns from table 1, which have more empirical support, are delineated below since these are the areas the clinician will need to concentrate on.

Sexual interests domain. In this domain two kinds of psychological risk factors are empirically supported. These are offense-related sexual interests and sexual preoccupation. Offense-related sexual interests are sexual interest in young children and/or the sexualization of violence (arousal to coercion, humiliation, brutality, etc.). Sexual preoccupation includes an intense involvement in impersonal sex (solitary masturbation, recurrent casual sex, excessive use of pornography, etc.), sexualized coping (sexual responses to stressful events or internal distress), and involvement in diverse unusual sexual activities (multiple paraphilias).

Traditionally offense-related sexual interests have been addressed with behavior therapy (olfactory aversion, satiation, directed masturbation, etc.). However, we presently lack evidence that these methods can produce sustained changes in sexual preference (see Laws & Marshall, 2003), and where clear offense-related preferences are present it may be better to regard them as enduring vulnerabilities that must be managed. Efforts at treating sexual preoccupation have been developed both with sexual offenders and outside the sexual offender field, since even legal hypersexual behavior can sometimes lead to distress and interpersonal chaos. Medical approaches to this problem have shown some promise (Garcia, Garcia, Delavenne, Assumpção, & Thibaut, 2013). Anti-androgens such as medroxyprogesterone acetate or cyproterone acetate have appeared to lower sexual interest (Briken & Kafka, 2007), as have luteinizing hormone-releasing hormone agonists (Briken, Hill, & Berner, 2003).

In addition, at least some problematic sexual preoccupation can be understood as a particular response to an underlying psychiatric or related disorder. Studies of men with paraphilias or non-paraphilic hypersexuality suggest an over-representation of dysthymic disorder, major depression, bipolar spectrum disorders, social anxiety disorder, childhood-onset post-traumatic stress disorder, ADHD, schizophrenia, Asperger’s syndrome, psychoactive substance abuse disorders (especially alcohol abuse), fetal alcohol spectrum disorder, and head injury (Briken & Kafka, 2007; Kafka, 2012). A common feature of these disorders is that effective prefrontal/orbitofrontal regulation of impulses and limbic over-reaction is compromised. Effective pharmacological treatment of these conditions may then restore better regulation of sexual impulses (Briken & Kafka, 2007; Garcia et al., 2013; Kafka, 2012).

Distorted Attitudes domain. Research has been less successful in distinguishing factors within this domain. We know that in a general sense pro-offending attitudes are related to recidivism and Helmus et al.

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Table 1. Meta-analytic results organized within the Structured Risk Assessment (SRA) Need Framework

Domain	Subdomain	Meta-analytic Results
Sexual Interests	Sexual Preoccupation <ul style="list-style-type: none"> Intense impersonal sexual interests Sexual coping Diverse sexual outlets 	<ul style="list-style-type: none"> Sexual preoccupation (S) Multiple paraphilias (S) Sexualized coping (P)
	Offense-Related Sexual Interests <ul style="list-style-type: none"> Sexual interest in prepubescent and pubescent children Sexualized violence 	<ul style="list-style-type: none"> Sexual interest in children (S) Sexualized violence (P)
Distorted Attitudes	Victim Schema <ul style="list-style-type: none"> Pro-offending schema about classes of potential victims (e.g., children or women) 	<ul style="list-style-type: none"> Pro-offending attitudes (S) Pro-child molestation attitudes (S) Pro-rape attitudes (S) Generic sexual offending attitudes (S)
	Rights Schema <ul style="list-style-type: none"> Excessive sense of entitlement 	<p><i>Note that there was insufficient data to look at the predictiveness of more specific attitudes, although all three SRA categories coincided with at least one of the broader categories used in the meta-analyses</i></p>
	Means Schema <ul style="list-style-type: none"> Machiavellianism Violent World schema 	
Relational Style	Inadequate Relational Style <ul style="list-style-type: none"> Dysfunctional self-esteem (inadequate or narcissistic) Emotional congruence with children 	<ul style="list-style-type: none"> Emotional congruence with children (S) Painfully low self-esteem was found consistently predictive in the UK, but not in other jurisdictions. Narcissistic self-esteem hasn't been examined in recidivism studies
	Lack of Emotionally Intimate Adult Relationships <ul style="list-style-type: none"> Lack of sustained marital type relationships Relationships marred by violence/infidelity 	<ul style="list-style-type: none"> Lack of sustained marital type relationships (S) Marital relationships marred by repeated violence/infidelity (S)
	Aggressive Relational Style <ul style="list-style-type: none"> Callousness Grievance Thinking 	<ul style="list-style-type: none"> Callousness (P) Grievance thinking (S)
Self-Management	Social Deviance <ul style="list-style-type: none"> Early onset and pervasive resistance to rules and supervision Lifestyle impulsiveness 	<ul style="list-style-type: none"> Childhood behavior problems (S) Juvenile delinquency (S) Non-sexual offenses (S) Non-compliance with supervision (S) Violation of conditional release (S) Antisocial personality disorder (S) Impulsivity/recklessness (S) Employment instability (S)
	Dysfunctional Coping in response to stress/problems <ul style="list-style-type: none"> Poor problem-solving Poor emotional control 	<ul style="list-style-type: none"> Poor Coping (externalizing) (P)

(2013) add the finding that this is specifically true for attitudes condoning either rape or child molestation. It also appears from this meta-analysis that attitudes that have been empirically examined are more predictive for child molesters than they are for rapists, and that prediction was better when the attitude was consistent with prior victim choice. Thus, pro-child molesting attitudes predicted recidivism better for child molesters than they did for rapists, and pro-rape attitudes were the best attitudinal predictor of recidivism for rapists (though this attitude was also predictive of recidivism when expressed by child molesters). Attitudes may therefore be a particularly relevant treatment target for child molesters, but, from our current state of knowledge, less so for rapists.

Sexual offender treatment providers are used to identifying and addressing pro-offending attitudes. Nevertheless, the main difficulty for this domain is distinguishing denial and minimization from more general pro-offending attitudes. Denial, in itself, is not empirically supported as a risk factor for sexual recidivism (Mann et al., 2010), although

it may block some kinds of treatment intervention. For instance, which psychological factors were active during the offense process and identifying and challenging pro-offending beliefs may both be more difficult if the offender is unwilling to discuss the specifics of their offenses in a meaningful way. However, there seems to be a complicated interaction between denial, re-offense risk, and type of offending (Harkins, Beech, & Goodwill, 2007; Langton et al., 2008; Nunes et al., 2007; Thornton & Knight, 2007). In essence, most of these studies suggest that denial may be an important treatment target for incest offenders but not for higher risk child molesters who have a more generalized pattern of offending.

Relational Style domain. Within this domain three kinds of problems have been empirically supported as related to recidivism, and as such are appropriate treatment targets. Some offenders feel inadequate in their relationships with adults, but are able to satisfy needs for emotional intimacy by making emotional connections with children. This appears to be a risk factor for those with a history of

offending against young children (Knight & Thornton, 2007), but seems to be irrelevant for rapists. Of more general relevance is difficulty forming and sustaining emotionally intimate relationships with adults. Similarly, a generally callous and/or hostile approach to others appears to be a risk factor for sexual offenders in general. It is important for treatment providers to distinguish this from apparently callous or hostile attitudes towards persons against whom the offender has committed sexual offenses. An apparent lack of remorse and appropriate empathy for the victims of offender's past sex offenses naturally tends to elicit negative judgments about the offender, and this has been a popular target in sexual offender treatment programs. However, research has consistently failed to find any relationship between the degree to which offenders show empathy for past victims and whether or not they go on to offend again (Mann et al., 2010). In light of this, it would be better for therapists to concentrate on encouraging offenders to develop more empathic ways of relating to the people they meet in their current lives, helping them to reduce their tendency to ruminate angrily over past situations in which they felt wronged, and helping them cope with angry feelings without expressing them in aggressive behavior.

Self-Management domain. Two main risk factors have been established within this domain, and there is some evidence for a third. The pattern consists of oppositional reactions to rules and supervision manifested in childhood behavior problems, juvenile delinquency, non-sexual adult crimes, and supervision violations. The second well established risk factor is a behavioral pattern characterized by lifestyle impulsiveness, including low tolerance for boredom, making decisions in an impulsive and reckless way, irresponsible lifestyle choices, and generally living without realistic long-term plans. Together, these subdomains represent different aspects of what is sometimes thought of as general criminality, a criminal lifestyle, or social deviance. These characteristics are often easily identifiable from the offender's past history, and often expressed in ongoing functioning in fairly obvious ways. Nevertheless, there are two potential traps for treatment providers trying to work with men high on these risk factors. One is failing to appreciate the relevance of these factors to sexual offending (thinking of the person as primarily a non-sexual criminal) and the second is reacting in an excessively controlling way to the rule-breaking/oppositional reactions and behaviors of this group. While boundaries do need to be maintained, this group in particular responds better to building a therapeutic relationship via an approach grounded in the spirit of motivational interviewing.

Some evidence points to a third kind of risk factor subdomain within the larger self-management domain, involving a pattern of dysfunctional coping (impulsive/reckless reactions) to everyday problems and stresses. There is less evidence regarding the predictive significance of this factor, so it is classified as promising rather than established. Nevertheless, such reactions are often apparent in the ongoing behavior of sexual offenders in treatment and seem appropriate as a treatment target, even if only on the grounds that it is a factor that

can contribute to a more general pattern of externalizing behavior.

■ Protective Factors

Protective factors can be defined as social or psychological factors that make recidivism less likely. It is possible to make subtle distinctions between three types of protective factors: (a) factors that are the opposite of risk factors, (b) factors that reduce risk, but for which no concrete corresponding risk factor can be defined, and (c) factors that are only protective in the presence of risk factors. However, in our present state of knowledge these distinctions are not particularly helpful; we are only just beginning to identify protective factors, and are not yet in a position to determine into which of these more subtle categories particular protective factors fall.

The significance of what might be called the “protective factors perspective” can be understood by contrasting it to a perspective that is solely focused on risk factors. Risk factors are generally better understood as long-term vulnerabilities – relatively enduring traits that change only slowly (Mann et al., 2010). Thus, an evaluation focused solely on risk factors is liable to be experienced as oppressive by the person being evaluated since the evaluator seems attentive only to deficit features of his life that are negative and hard to change. Offenders with treatment plans focused solely on risk factors may then be primarily concerned with learning to avoid or not observably express these long-term vulnerabilities. This leads to the ironic position that offenders in treatment basically have an incentive to not to put out or display any noticeable behavior or behavior that may point to personal vulnerabilities.

A Protective Factors Perspective

The protective factors perspective can be distinguished from a long-term vulnerability perspective in three ways: (a) It attends to positives – factors whose presence is desirable; (b) it attends to environmental factors, in which protection is seen as potentially linked to how well the individual's surrounding environment is functioning, as well as how the individual is functioning; and, (c) it views protective factors in a highly dynamic way, generally focusing on functioning over the last three to twelve months, while also considering likely functioning in future environments toward which the assessment is directed.

From this perspective, risk factors should not be ignored. However, complementing and balancing the attention paid to risk factors with attention paid to protective factors is much more motivating for the people being evaluated or treated, and specifically makes it easier to engage offenders in the evaluation and therapeutic process. An additional desirable consequence is that, in order to demonstrate progress, offenders need to demonstrate the presence and action of protective factors in their lives and so need to engage in observable behaviors that reflect such factors. This should make it easier for both treatment providers and evaluators to judge progress.

Understanding Protective Factors

These strategic advantages are motivating researchers to begin the painstaking work required to empirically identify factors that play a protective role, although this work is still in its early stages. Work is more highly developed in relation to factors that are protective in relation to general violence, but a review by de Vries Robbé, Mann, Maruna, and Thornton (2013) summarizes what is known about factors that are protective in relation to sexual offending. This review draws on the wider literature on protective factors and desistance, as well as findings with specific measures of protective factors intended for use with sexual offenders.

The following is based on de Vries Robbé et al. (2013), but also takes into account findings from research with ARMIDILO, a risk assessment instrument developed for the evaluation of sexual risk in persons who have intellectual disabilities (Blacker, Beech, Wilcox, & Boer, 2011; Lofthouse et al., 2013). From these sources, positive factors, both personal and environmental, that have been related to reduced recidivism when assessed in an actively dynamic way, are extracted and summarized below under five headings.

- 1. Professional support.** Relevant environmental aspects of professional support include the degree of external control it provides, the extent of supervision and treatment services, the attitudes of professionals toward the individual, and how well professionals working with the individual know him, and communicate among themselves.
- 2. Social Network.** Among relevant environmental aspects of the offender's social network is the inclusion of well functioning individuals who model effective coping and prosocial attitudes, and at least one person who is an emotionally intimate confidante.
- 3. Structured Group Activities.** Relevant aspects of structured group activities include group leisure activities, employment, and education. Involvement in prosocial group activities of this kind provides some informal social policing of individuals' behavior, as well as reducing the time available for potentially antisocial activities. Positive involvement in structured group activities can also contribute to individuals experiencing a sense of being valued and making a valuable contribution, and so increases their investment in living a law-abiding life.
- 4. Goal Directed Living.** This involves individuals having a sense of personal agency, actively managing their lives on the basis of realistic medium and long-term goals, resisting short-term temptations to engage in behaviors that would disrupt these plans, and having sufficient problem-solving skills to overcome obstacles that will impede progress toward their goals.
- 5. Hopeful and Persistent Attitude to Desistance.** This involves the offender seeing desistance as possible and worth striving for, even in the face of difficulties. It involves developing a more prosocial and “redeemed” identity that competes with the earlier sense of self as cunning and deviant.

It also involves developing the ability to find positives even at times of setbacks, or positives that support the individual's ability to respond resiliently to such setbacks.

The first three of these factors may be thought of as primarily external protective factors, while the last two are primarily internal. It would be a mistake, however, to think of any of these factors as solely external or solely internal. Even when a protective factor is primarily external, its effect will greatly depend on the individual possessing the skills, attitudes, and motivation required to respond well to external protection. For example, the effectiveness of professional support will depend on the individual having positive attitudes toward and cooperating with authority figures, therapists, and the treatment process. Similarly, someone who is suspicious, hostile, and belligerent is liable to have more difficulty finding and sustaining a place in a positive social network.

Further, even when a factor is primarily internal, environments can vary greatly in how far they afford an opportunity for the internal factor to be positively expressed, as well as the degree to which they encourage the development of the internal factor. So, for example, goal-directed living is harder if the environment is overly structured, in which individuals are not allowed to make choices for themselves, or if environmental responses are random and inconsistent in their support as individuals attempt to engage in goal-directed living. Similarly, building and maintaining a prosocial identity is easier when the social messages received from others are consistent with such an identity while it is much harder when others convey that they see individuals as irretrievably deviant.

Applying a Protective Factors Approach

Thinking in terms of protective factors can materially shift the goals and perspective of treatment. From this perspective, risk is seen as best managed by building up protective factors rather than by solely attending to or containing the risk factors themselves. This more positive focus not only expands the practice of treatment for sexual offenders, but also makes it easier to develop a therapeutic alliance with offenders. While individuals should be encouraged to develop their own external protective factors (especially the social network and structured group activities factors), part of the therapist's role should be to facilitate this process. Ideally, the individual should both be helped to develop these protective factors now and, at the same time, learn the skills required to re-create and build new external protective factors should this be necessary in the future.

Hopefully, therapists will not be working in isolation, but instead will be part of a broader risk management/resettlement team. This team should, of course, be attentive to potential environmental risks hidden in apparently protective external factors – for example, structured activities that increase access to potential victims. Nevertheless, therapists in particular should advocate that excessive reliance on reducing opportunities to reoffend (a classic response in the sexual offender treatment) may also inhibit the development of protective factors, and so paradoxically increase risk.

■ Revisiting Classic Treatment Tasks

In opening this article, the classic tasks of sexual offender treatment as they were understood around the year 2000 were identified as: (a) Eliciting accounts of past deviancy and offending, (b) challenging denial and self-serving cognitive distortions, (c) developing empathy for victims, (d) analyzing past offenses in order to identify offense precursors, (e) developing a relapse prevention plan designed to be relevant to identified offense precursors, and (f) rehearsing skills for putting this plan into practice. Since these tasks are still commonly used, it is worth considering both their value and how they might be reshaped in the light of what we now know about risk and protective factors.

From the present perspective, the task of eliciting accounts of past deviancy and offending still has a role, but primarily to identify psychological risk factors most relevant to each individual; to identify the strengths of each individual, which can then be built into protective factors; to become aware of likely victim preferences; and by which to understand past modus operandi so that risks that might otherwise be hidden in apparently protective factors can be identified. This task comes with several dangers, however. One is getting bogged down trying to identify details that do not serve these goals, and so wasting treatment time: when offenders' accounts of their offenses differ from the official account it is only worth seeking to resolve this difference where the discrepancy makes a difference in the identification of psychological risk factors or modus operandi. Another danger is that the individual may be encouraged to over-attribute his offending to fixed and static internal characteristics (such as "past deviancy"). However, this is liable to interfere with the fifth domain of protective factors (Hopeful and Persistent Attitude to Desistance).

Challenging denial and self-serving cognitive distortions likewise comes with opportunities and dangers. Goals relevant to this aspect of treatment include (a) challenging generalized beliefs about women or children that may make it easier to rationalize rape or child molestation, and (b) more realistically identifying psychological risk factors. Conversely, dangers include getting stuck in a battle over denial (something that is better worked around than battled through), and pushing the offender for more ownership of psychological risk factors than may be required. The goal here is only to get enough ownership of psychological risk factors to motivate relevant self-management.

Developing empathy for victims should at most be done with a light touch. Working with offenders until they display what we recognize as victim empathy is likely a distraction, since what we recognize as empathy for victims seems unrelated to risk for sexual recidivism. Some of what has been done in treatment in this area can be refocused on addressing distorted beliefs about women or children, rather than eliciting what we consider to be victim empathy.

Analyzing past offenses by which to identify offense precursors can contribute to identifying those psychological risk factors relevant to the individual, as well as an awareness of likely victim preferences and past modus operandi. The main danger here is

the distraction created by pursuing aspects of this task that aren't relevant to meeting these goals.

Developing a relapse prevention plan designed to be relevant to identified offense precursors is of limited relevance. Having a plan doesn't mean that the plan will be followed. Development of motivation and skills is more critical. Additionally, some relapse prevention plans are so focused on risk avoidance that they define a life few people would willingly live. A more useful equivalent is focusing on what activates the individual's long-term vulnerabilities, how the frequency and intensity of these activations can be reduced, and how to safely return to equilibrium when vulnerabilities are activated.

Finally, rehearsing skills for putting a relapse prevention plan into practice is relevant if it is reconceptualized as learning and practicing the skills needed for managing long-term vulnerabilities.

It is important to emphasize, however, that an individual could engage in and complete each of these now classic treatment tasks in a meaningful way, but still have done little to develop protective factors. Additionally, a one-sided emphasis on managing risk factors is liable to be demotivating. It is recommended, therefore, that education about protective factors begins early in treatment and that work on developing protective factors goes hand in hand with work on identifying, containing, and reducing or eliminating risk factors.

■ References

- Andrews, D.A. & Bonta, J. (2006) *The Psychology of criminal conduct* (4th ed.) Newark, NJ: LexisNexis.
- Blacker, J., Beech, A. R., Wilcox D. T. & Boer D. P. (2011) The assessment of dynamic risk and recidivism in a sample of special needs sexual offenders. *Psychology, Crime and Law* 17, 75–92.
- Briken, P. & Kafka, M.P. (2007). Pharmacological treatments for paraphilic patients and sexual offenders. *Current Opinion in Psychiatry*, 20, 609–613.
- Briken P, Hill A, & Berner W. (2003). Pharmacotherapy of paraphilias with long-acting agonists of luteinizing hormone-releasing hormone: a systematic review. *Journal of Clinical Psychiatry*, 64, 890–897.
- de Vogel, V., de Ruiter, C., Bouman, Y., & de Vries Robbé, M. (2012). *SAPROF: Guidelines for the assessment of protective factors for violence risk. 2nd Edition*. Utrecht, The Netherlands: De Forensische Zorgspecialisten.
- de Vries Robbé, M., Mann, R.E., Maruna, S., & Thornton, D. (2013). *A review of protective factors supporting desistance from sexual offending*. Manuscript under review.
- García, F. D., Delavenne, H.G., Assumpção, A. F. A., & Thibaut, F. (2013). Pharmacologic treatment of sex offenders with paraphilic disorder. *Current Psychiatry Reports*, 15, 356. Published online: 10 April 2013. doi: 10.1007/s11920-013-0356-5
- Griffin, H., Beech, A. R., Print, B., Bradshaw, H. & Quayle, J. (2008). The development and initial testing of the AIM-2 framework to assess risk and strengths in young people who sexually offend. *Journal of Sexual Aggression*, 14, 211–225.
- Hanson, R. K., Gordon, A., Harris, A. J. R., Marques, J. K., Murphy, W., Quinsey, V. L., & Seto, M. C. (2002). First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 14, 169–194.
- Hanson, R. K., & Bussière, M. T. (1998). Predicting relapse: A meta-analysis of sex offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348–362.
- Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders : A meta-analysis. *Criminal Justice and Behavior*, 36, 865–891

Harkins, L., Beech, A., & Goodwill, A. (2007, October). *The influence of denial and actuarial risk on sexual recidivism*. Presentation at the 26th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, San Diego, California.

Harkins, L., Thornton, D., & Beech, A. (2009, October). *The use of dynamic risk domains assessed using psychometric measures to revise relative risk assessment using RM2000 and Static-2002*. Paper presented at the 28th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, Dallas, Texas.

Helmus, L., Hanson, R. K., Babchishin, K. M., & Mann, R. E. (2013). Attitudes supportive of sexual offending predict recidivism: A meta-analysis. *Trauma, Violence, and Abuse*, 14, 34–53. doi:10.1177/1524838012462244

Kafka, M.P. (2012). Axis I psychiatric disorders, paraphilic sexual offending and implications for pharmacological treatment. *The Israeli Journal of Psychiatry and Related Sciences*, 49, 255–261.

Knight, R.A. & Thornton, D. (2007). Evaluating and improving risk assessment schemes for sexual recidivism: a long term follow up of convicted sexual offenders. Final Report: US Department of Justice, Award Number 2003-WG-BX-1002. <http://www.ncjrs.gov/pdffiles1/nij/grants/217618.pdf>

Langton, C. M., Barbaree, H. E., Harkins, L., Arenovich, T., McNamee, J., Peacock, E. J., Dalton, A., Hansen, K. T., Luong, D., & Marcon, H. (2008). Denial and minimization among sexual offenders: Posttreatment presentation and association with sexual recidivism. *Criminal Justice and Behavior*, 35, 69–98.

Laws, D. R. & Marshall, W. L. (2003). A brief history of behavioral and cognitive behavioral approaches to sexual offenders: Part 1. Early developments. *Sexual Abuse: A Journal of Research and Treatment*, 15, 75–92. doi: 10.1177/107906320301500201

Lofthouse, R. E., Lindsay, W. R., Totsika, V., Hastings, R. P., Boer, D. P., & Haaven, L. (2013). Prospective dynamic assessment of risk of sexual reoffending in individuals with an intellectual disability and a history of sexual offending behavior. *Journal of Applied Research in Intellectual Disabilities*, 26, 394–403.

Marshall, W. L., Fernandez, Y. M., Serran, G. A., Mulloy, R., Thornton, D., Mann, R. E., & Anderson, D. (2003a). Process variables in the treatment of sexual offenders: A review of the relevant literature. *Aggression and Violent Behavior: A Review Journal*, 8, 205–234.

Marshall, W. L., Serran, G. A., Fernandez, Y. M., Mulloy, R., Mann, R. E., & Thornton, D. (2003b). Therapist characteristics in the treatment of sexual offenders: Tentative data on their relationship with indices of behaviour change. *Journal of Sexual Aggression*, 9, 25–30.

Marshall, W. L., Serran, G., Moulden, H., Mulloy, R., Fernandez, Y. M., Mann, R. E., & Thornton, D. (2002). Therapist features in sexual offender treatment: Their reliable identification and influence on behaviour change. *Clinical Psychology and Psychotherapy*, 9, 395–405.

Mann, R. E., Hanson, R. K., & Thornton, D. (2010). Assessing risk for sexual recidivism: Some proposals on the nature of psychologically meaningful risk factors. *Sexual Abuse: A Journal of Research and Treatment*, 22, 191–217. doi: 10.1177/1079063210366039

Nunes, K. L., Hanson, R. K., Firestone, P., Moulden, H. M., Greenberg, D. M., & Bradford, J. M. (2007). Denial predicts recidivism for some sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 19, 91–105.

Thornton, D. (2002). Constructing and testing a framework for dynamic risk assessment. *Sexual Abuse: A Journal of Research and Treatment*, 14, 139–153. doi: 10.1023/A:1014620214905.

Thornton, D., & Knight, R. (2007, October). *Is denial always bad?* Presentation at the 26th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, San Diego, California.

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