

**REINTEGRATION PLANNING FOR  
SEXUAL OFFENDERS:  
RELATIONSHIPS WITH STATIC AND  
DYNAMIC RISK, TREATMENT  
OUTCOME AND RECIDIVISM**

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## **ABSTRACT**

Willis and Grace (2008, 2009) developed a protocol for measuring quality of planning for community reintegration by sexual offenders, and showed that poor planning was a risk factor for sexual recidivism. The present study evaluated the reliability and predictive validity of Willis and Grace's protocol with a large, representative sample of child molesters who completed a prison-based treatment programme between 1993 and 2000. Overall, the quality of reintegration planning was good for the sample as a whole, with an average equal to 61.7% of the maximum possible score. Results supported the reliability and predictive validity of the protocol in assessing reintegration quality. Reintegration scores were negatively correlated sexual recidivism and with measures of pre-treatment static and dynamic risk, particularly the Criminality and Treatment Responsivity factors of the Violence Risk Scale: Sexual Offender Version (VRS: SO; Olver, Wong, Nicholaichuk, & Gordon, 2007). Measures of intelligence and treatment outcome were positively correlated with reintegration quality, particularly the Standard Goal Attainment Scaling for Sex Offenders (SGAS; Hogue, 1994), suggesting that offenders who were successful in achieving treatment goals were also likely to have effective reintegration plans. Survival analyses (Cox regression) showed that reintegration planning contributed additional validity for predicting sexual recidivism when static risk but not dynamic risk was controlled. Overall, results support the utility of Willis and Grace's protocol for measuring quality of reintegration planning. Future research should examine reintegration planning for other types of sexual and non-sexual offenders.

## INTRODUCTION

### *Overview*

Childhood sexual abuse is a widespread societal problem. Finkelhor (1994) examined prevalence estimates of childhood sexual abuse reported from 20 countries, and found that estimates ranged from 7-36% of females and 3-29% of males as childhood sexual abuse victims. Pereda, Guilera, Forns and Gómez-Benito (2009) updated Finkelhor's study by adding an additional 18 studies and found estimates ranging from 0-53% of females and 0-60% of males. In New Zealand, a cross-sectional study involving 2,855 women found that 23.5% of those living in an urban region and 28.2% of those living in a rural region reported having been sexually touched or coerced into doing something sexual they did not want to do prior to 15 years of age (Fanslow, Robinson, Crengle, & Perese, 2007).

The effects of childhood sexual abuse are profound. A review by Tyler (2002) linked childhood sexual abuse to suicide, substance abuse, gang involvement, pregnancy and risky sexual behaviour, post-traumatic stress disorder, and behavioural and emotional problems. Because of its prevalence and damaging effects on victims, it is important that society attempt to reduce childhood sexual abuse. In addition to primary prevention, increasing detection, reporting, apprehension, and prosecution rates help to reduce abuse, another important endeavour is the provision of treatment to convicted offenders, with the aim of reducing recidivism and preventing future victims. Because most offenders are released back into the community, it is also important to understand the reintegrative needs of sexual offenders and the impact of reintegration failure on recidivism.

The goal of this thesis is to investigate the reliability and validity of a recently developed measure for reintegration planning, with the rest of this chapter providing a review of relevant background literature. The review begins with examination of studies relevant to the rehabilitation of sexual offenders in forensic psychology and desistance in criminology. Research related to risk assessment with sexual offenders is considered next, followed by studies on the reintegration process for offenders returning to the community, with particular attention paid to research with sexual offenders. Finally, recent studies on the linkage between reintegration planning and recidivism in sexual offenders are described, and an outline of the present study is provided.

### *Literature Review*

#### *Rehabilitating Sexual Offenders*

This section focuses on models relating to the area of offender rehabilitation. The first part of this section details the risk management approach (Andrews & Bonta, 2006), illustrating the treatment of offenders, its specific application to sex offenders, including a description of the Kia Marama treatment programme which provided the sample for the present study, a review of treatment efficacy and associated limitations, and finally, criticism of the risk management approach. Next, the Good Lives Model (Ward & Stewart, 2003), a strengths-based model of offender rehabilitation will be discussed. Included will be an outline of the treatment process according to the Good Lives Model as well as emerging empirical support for this model.

### *The Risk Management Approach*

In 1994, the *Psychology of Criminal Conduct* (PCC; Andrews & Bonta, 2006), now in its fourth edition, was published. In the PCC, Andrews and Bonta argued that traditional methods of sanctions and punishment did little to reduce recidivism. They suggested that human services could reduce recidivism by targeting factors that had been associated with recidivism and outlined three principles that such services should follow. These are the principles of risk, need, and responsivity (Andrews & Bonta, 2006; Andrews, Bonta, & Hoge, 1990). Together, these principles are known as the RNR model of rehabilitation.

The risk principle consists of two aspects. First, it states that criminal behaviour can be predicted. Research on risk prediction specific to sexual offending is discussed in a later section of this review. The second principle is that levels of treatment services should match the risk level of the offender. This means that intensive interventions should be given to offenders that pose a high risk for future offending, while less intense (or no) interventions should be given to low risk offenders. Bonta, Wallace-Capretta, and Rooney (2000) evaluated an intensive rehabilitation supervision programme for general offenders. Offenders were selected based on having committed a non-violent, nonsexual offence, and received a sentence of less than 6-months and a moderate-risk assessment. Offenders were divided into three groups, treated offenders under electronic monitoring, treated probationers, and released inmates who did not receive treatment. All groups were matched according to their risk-needs classification score. Treatment consisted of four modules focusing on anger management, criminal thinking, substance abuse and relapse prevention. Bonta et al. (2000) showed that high-risk offenders who received

treatment reoffended at a lower rate than those who did not receive treatment. However, low risk offenders who received treatment reoffended at a greater rate than those who did not receive treatment. As a possible explanation for this result, Bonta et al. suggested that high intensity treatment programmes might expose low risk offenders to criminal thinking and criminal modelling through association with high-risk offenders.

The need principle distinguishes between criminogenic and noncriminogenic needs. Criminogenic needs are factors with a causal relationship to reoffending, while noncriminogenic needs have no causal relationship. For example, criminogenic needs associated with sexual offending include sexual interests or problems with self-regulation, while noncriminogenic needs include low self-esteem or a history of victimisation (Hanson & Bussière, 1998; Hanson and Morton-Bourgon, 2005). According to the need principle, interventions must target criminogenic needs, as directing interventions at noncriminogenic needs will be ineffective, because they are not associated with recidivism (Andrews & Bonta, 2006).

The responsivity principle informs the actual delivery of the treatment programmes to maximise their efficacy. This principle proposes that interventions should be based on cognitive-behavioural therapy (CBT) as such interventions are viewed as the best available (e.g., Hanson et al., 2002). An example is the Kia Marama programme, described in the following section. The responsivity principle also proposes that to maximise the efficacy of treatment, programmes should consider the personal characteristics of offenders, such as learning style, personality, or cultural factors.

### *Treating Sexual Offenders*

Relapse Prevention (RP; e.g. Laws, 1989) has become the predominant treatment format for treating sexual offenders. Alan Marlatt and colleagues developed RP during the 1970's and 1980's as a means for maintaining gains from treatment for addictive behaviours (Marlatt & Gordon, 1985). Originally intended as a maintenance strategy, RP has since become a formal treatment, as is the case with sexual offenders (Laws, Hudson, & Ward, 2000).

RP describes sexual offending behaviour as part of a sequential chain of events. First, seemingly irrelevant decisions (e.g., taking a shortcut home) lead to offenders finding themselves in a high-risk situation (e.g., a park where children are playing). Once in these high-risk situations, maladaptive (e.g., drinking to deal with arousal) or nonexistent coping responses to the situation may lead to a lapse occurring (e.g., masturbating to a fantasy), potentially leading to a decrease in self-efficacy due to recognition of the fact that a commitment to abstinence has been violated (termed the 'abstinence violation effect' Marlatt & Gordon, 1985). How an individual responds to the abstinence violation effect will determine the likelihood of a relapse (offending) occurring. If an individual attributes the lapse to external, controllable factors (e.g., admitting they made a mistake but continue to believe they can prevent a relapse) then the likelihood of a relapse will be low. However, if the lapse is attributed to internal and unavoidable factors (e.g., they do not have the willpower to stop a relapse), then the likelihood of a relapse will be high (Laws, 2003). The premise that underlies RP treatment is that the offence chain can be broken at any point, thus preventing a relapse, using cognitive-behavioural techniques such as coping strategies to prevent movement

from one stage of the offence process to the next. One example operating in New Zealand is the Kia Marama programme.

*Kia Marama.* Kia Marama (meaning *into the light*), established in 1989 by the New Zealand Department of Corrections, is a prison-based treatment programme for men who have sexually offended against children. Located within a medium-security 60-bed unit at Rolleston Prison near Christchurch, New Zealand, the treatment programme is based on cognitive-behavioural principles, with an RP framework, and continues to evolve with advances in research. The description of the programme outlined here (for a detailed review, see either Hudson, Marshall, Ward, Johnston, & Jones, 1995 or Hudson, Wales, & Ward, 1998) refers to the period during which the sample utilised for this study were receiving treatment, from around 1993 to 2000.

The treatment programme aims to reduce an offender's risk of recidivism after release back into the community. Entry is voluntarily and commences toward the end of their sentences. Requirements for entry include a medium or minimum-security classification; a conviction or admission of sexual offence(s) against a person under the age of 16 years, and not considered intellectually disabled (defined as having an IQ of less than 70). Treatment runs for 33 weeks, including 2-week assessment periods prior to treatment commencing and again upon completion. Groups of 10 men meet with a therapist three times per week for 2.5 hour-long sessions. The programme consists of eight modules, labelled: Norm building; offence chains; arousal reconditioning; victim impact and empathy; mood management; relationship skills; sexuality; and relapse prevention.

Starting with the norm building module, participants introduce themselves, discuss their reasons for entering treatment and collaboratively establish the rules of group conduct, including confidentiality and communication guidelines. In the offence chain module, offenders identify their individual offence chain and present it to the group. This module aims for an offender to develop an understanding of the various events in their chain and the links between them.

The arousal reconditioning module addresses deviant sexual arousal using behavioural interventions to reduce deviant arousal and strengthen arousal to appropriate thoughts and images (e.g., adult sexual partners). In the victim impact and empathy modules, participants identify and learn about the immediate, short-term, and long-term effects that sexual abuse has on victims using readings and videos depicting victims' experiences. The final step in the modules involves each offender writing an "autobiography" from the perspective of their victim, which they read aloud, and sets the scene for a role-play where they alternate between the role of the victim and themselves.

The mood management module teaches offenders to recognise and manage their moods. Offenders are instructed about the cognitive-behavioural model of mood, how to identify a range of affective states and finally they are taught strategies to manage their moods. During the relationship skills module, the meaning and value of intimacy in adult relationships, as well as the blocks or fears that may prevent people from achieving it are examined. Each group member identifies their own relationship style, assesses whether it is dysfunctional, and learns skills that allow them to enhance intimacy and resolve conflict.

The sexuality module provides education about anatomy and function, sexual dysfunctions, and acceptable adult sexual relations. In addition, the module aims to assist men confused about their adult sexual orientation to clarify their self-concept. Finally, the relapse prevention module involves the members revising relevant offence chain concepts and coping strategies appropriate to each of the links, emphasising choices and personal agency. Group members identify their own high-risk situations, internal and external warning signs. They then develop a personal life plan to avoid reoffending.

With the supervision of a reintegration coordinator, offenders create and refine a release plan. The reintegration coordinator oversees this process for each offender at Kia Marama and liaises between the offender, the support network of the offender and community agencies, with priority given to finding appropriate support people and accommodation to help support the goal of preventing relapse. Men are released to the communities they came from rather than locally. This is to minimise adverse community reaction and to maximise support during the transition out of prison. On an offender's release, a report containing final reintegration plans is forwarded to the Community Probation Service (CPS). Release conditions typically include an approved residence, regular meetings with CPS and regular attendance at one of the monthly Kia Marama follow-up support groups located around the country.

### *Treatment Effectiveness*

The efficacy of sexual offender treatment programmes has been the subject of much research. A meta-analysis by Hanson et al. (2002) identified 43 studies, which compared treated and untreated sexual offenders, with a combined sample size of 9,454

sexual offenders. They found that after an average follow-up period of 46 months, treated sexual offenders had a lower rate of sexual recidivism compared to untreated offenders (12% and 17% respectively). Effects on sexual recidivism were larger for contemporary treatment approaches (cognitive-behavioural based treatments for adult offenders, systemic treatment for juvenile offenders), and incidentally assigned control groups. The effect for studies involving random assignment was not significant, although this category only had three studies assigned to it.

Included in the meta-analysis by Hanson and colleagues was an evaluation of the Kia Marama treatment programme (Bakker, Hudson, Wales & Riley, 1998). In this study, the sexual recidivism rates of 238 Kia Marama graduates were compared to a comparison group of 281 offenders released from New Zealand prisons before the establishment of the Kia Marama programme. Over an average follow-up time of 21 months, results showed that the Kia Marama graduates reoffended less than the comparison group, with recidivism rates of 8% and 21% respectively. This effect remained after controlling for the number of previous convictions and time at large.

While studies have shown that treatment can be effective with sexual offenders, researchers have pointed out that evaluating treatment effectiveness is difficult (Craig, Browne, & Stringer, 2003; Losel & Schmuker, 2005). When evaluating treatment programmes, random controlled trials are a strong method of doing so. However, this rarely occurs when assessing treatment programmes for sexual offenders. One previous study did use random assignment. Marques, Wiederanders, Day, Nelson and van Ommeren (2005) conducted a randomised clinical trial, assigning participants to a group that received treatment or to one of two untreated prison controls. Over a follow-up

period of 8 years, there were no significant differences in recidivism rates found among the three groups. Marshall and Marshall (2007) criticised random controlled trials as being inappropriate. They argued that random controlled trials are unable to match the groups on all possible variables, making inferences about cause and effect difficult. They also noted difficulties that administrators may not support research that denies offenders treatment, and ethical problems with denying treatment to offenders who might pose a risk to society. Seto et al. (2008) responded to these criticisms by arguing that potential problems of non-equivalence between experimental and control groups can be addressed statistically, by using larger samples or recruiting from various locations, that investigators can gain support of administrators for randomised trials, and that providing unproven treatment programmes may increase an offender's risk.

The definition and measurement of recidivism also poses difficulties in assessing treatment effectiveness (Durkin & Digianantonio, 2008). Definitions of recidivism can range from arrest (for any offence or specifically a sexual offence), to a reconviction (again this could be for any offence of a sexual offence) or a subsequent sexual offence. Additionally, recidivism is often measured using official statistics, but these can be inaccurate as sexual offences often go unreported (Sample & Bray, 2006) and plea bargaining or other negotiations result in other charges rather than a sexual offence charge (e.g., a violent offence; Firestone et al., 2000).

Sexual offenders who dropout or refuse treatment reoffend at greater rates, compared to those who complete treatment (Hanson et al., 2002). Some researchers have raised concerns at the omission of non-completers from studies of treatment efficacy (e.g., McConaghy, 1999). Not removing refusers and dropouts from an untreated

comparison group inflates the recidivism rate of this group in comparison to those in the group who would have completed treatment if offered (Seager, Jellicoe, & Dhaliwal, 2004).

Sexual offenders are at risk throughout their lifetime (Hanson, Steffy, & Gauthier, 1993). Yet, follow-up times used in research are often relatively short, leading to the possibility of eventual reoffenders classified as nonoffenders. Durkin and Digianantonio (2008) have suggested that anything less than five years is inappropriate; similarly, Hanson and Bussière (1998) suggest 5-10 years as a follow-up period.

#### *Criticisms of the Risk Management Approach*

Research shows that the risk management approach is effective in reducing recidivism. Yet critics of this approach suggest that it is a necessary but not sufficient foundation for effective interventions (e.g., Ward & Stewart, 2003) as they argue that the risk management approach is limited in a number of ways.

One criticism of the risk management approach is the difficulty in motivating offenders to participate in treatment (e.g., Ward & Langlands, 2009). Mann (2000) highlighted three conditions that needed to be present for RP interventions to be effective. Briefly, these conditions are that the client must want to avoid further offending, they must accept the RP model and finally they must accept the RP methods. However, Mann suggested that many offenders might not accept these conditions, illustrating this point with three case examples. Mann argued RP interventions could be improved with the application of goal-setting theory.

According to goal-setting theory, there are two types of goals, approach and avoidance goals. Approach goals involve behaviours designed to approach a desired outcome, while avoidance goals involve behaviours to avoid an outcome. Both of these goal types can aim towards achieving the same outcome, for instance someone may join a social activity to make friends while someone else may join to avoid feeling lonely (Emmons, 1996). While both approach and avoidance goals may aim for the same outcome, people who use approach goals focus on positive outcomes and persist longer than people driven by avoidance goals, who tend to focus on threats (Higgins, 1996).

In the RP framework, offenders learn what thoughts, situations or behaviours they should avoid to prevent relapse (i.e., reoffending), representing an avoidance goal. Mann suggested reframing RP in a way that focuses on approach goals, suggesting that the goal of treatment might be “to become someone who lives a satisfying life that is always respectful of others” (Mann, 2000, p. 194). Reframing RP in this way may enhance treatment engagement. Supporting this idea, Mann, Webster, Schofield, and Marshall (2004) compared an approach-orientated RP programme with a more traditional avoidance-orientated programme. They found that participants in the approach-orientated programme showed greater treatment engagement and lapse disclosure compared to the traditional RP programme and the approach-orientated programme was as effective as the traditional RP programme at improving relapse knowledge.

The RNR approach also argues that addressing noncriminogenic needs is unlikely to change an offender’s risk of recidivism. However, research has shown that noncriminogenic needs can play an important role in treatment. One noncriminogenic need that can influence treatment outcome in sexual offenders is self-esteem. Thornton,

Beech, and Marshall (2004) showed that offenders with high levels of pre-treatment self-esteem reoffended at a lower rate compared to offenders with low levels of pre-treatment self-esteem. Another noncriminogenic need is the therapeutic alliance (e.g., Marshall et al., 2003). In their study, Marshall et al. (2003) looked at the relevance of process issues for treating sexual offenders. They found that therapist's style, the client's perceptions of the therapist, and the alliance between client and therapist all influenced treatment effectiveness. Thus, attending to noncriminogenic needs during treatment could strengthen the therapeutic alliance, leading to greater engagement with the programme and treatment efficacy (Thornton et al., 2004; Ward & Maruna, 2007).

Critics of the RNR model argue the risk management approach of current sex offender treatment programmes constitutes a necessary but not sufficient foundation for effective interventions (Ward & Maruna, 2007; Ward & Stewart, 2003). They argue that offender rehabilitation focus on not just reducing risk, but also promoting human needs and values through approach goals, thereby engaging offenders in the treatment process (Ward & Brown, 2004). One model that accommodates this dual focus is the Good Lives Model. This model was initially developed with sexual offenders (Ward & Stewart, 2003), but has since been applied to other offender types such as violent (Whitehead, Ward, & Collie, 2007) and domestic violence (Langlands, Ward, & Gilchrist, 2009) offenders. A description of this model follows.

#### *The Good Lives Model*

Ward & Stewart (2003) originally developed the Good Lives Model (GLM). Since then, Ward and his colleagues (e.g., Ward & Gannon, 2006) have developed it

further. The GLM is a strength-based framework, aimed at the rehabilitation of offenders. The model assumes that human beings seek experiences that are consistent with their personal beliefs and values, and all actions reflect attempts to achieve *primary goods*.

Primary goods are states of affairs, states of mind, personal characteristics, activities or experiences that when met enhance psychological well being (Ward & Stewart, 2003). According to the GLM, offenders hold a set of primary goods, with the weightings or priorities given to these goods reflecting the offender's values. Upon reviewing psychological, biological, and anthropological research, Ward and Stewart (2003) proposed nine classes of primary goods. These primary goods are: (1) life (including healthy living and optimal physical functioning, sexual satisfaction), (2) knowledge, (3) excellence in play and work (including mastery experiences), (4) excellence in agency (i.e. autonomy and self-directedness), (5) inner peace (i.e. freedom from emotional turmoil and stress), (6) relatedness (including intimate, romantic and family relationships) and community, (7) spirituality (in the broad sense of finding meaning and purpose in life), (8) happiness, and (9) creativity (Ward & Stewart, 2003, p. 356). This list was then increased to 10 by separating the goods of relatedness and community (e.g., Ward & Gannon, 2006; Ward, Mann, & Gannon, 2007). Instrumental, or *secondary* goods, provide the concrete ways or means of securing these primary goods (Ward & Gannon, 2006), for example, certain types of work may fulfil the good of mastery.

Ward and colleagues (e.g., Ward, Mann, & Gannon, 2007; Ward & Marshall, 2004) suggest that criminal behaviour results from at least one of four problems in the

good lives plans of offenders. Briefly, these problems are using inappropriate means to obtain primary goods, a lack of scope within the good lives plan, conflict among goods sought, and the lack of capacity to form, develop, and adjust a good lives plan.

### *Treatment Process*

Ward and his colleagues have outlined the treatment process according to the GLM (Ward & Brown, 2004; Ward et al., 2007). Assessment begins with mapping out an offender's good lives plan with the aim of understanding how offenders prioritize and operationalise primary goods. A case formulation follows, aiming to identify clinical phenomena, primary goods related to offending, appropriate secondary goods and the environment into which the offender will be released.

The intervention consists of a group-based application of the GLM based on seven modules that are typical of current sexual offender treatment programmes. These modules are establishing therapy norms, understanding offending and cognitive restructuring, dealing with deviant arousal, victim impact and empathy training, affect regulation, social skills training, and relapse prevention. According to Ward et al. (2007), each module is associated with an overarching primary good or goods. For instance, the establishment of group norms is associated with the primary good of relatedness, while the social skills module is associated with the primary goods of relatedness, community and personal agency.

The GLM argues that the type of interventions that individuals receive during each module should follow from their good lives plans, particularly according to the priorities they place on the primary goods. For example during the social skills module,

Ward et al. (2007) suggest that an individual who places greater importance on goods like work or mastery than relationships may only need to learn basic social skills, while someone who places greater emphasis on intimate relations may need more intensive therapeutic work.

### *Empirical Support*

The GLM is a new initiative so there is little research on this rehabilitation model. As part of their study, Barnett and Wood (2008) examined how offenders prioritised the primary goods of agency, relatedness, and inner peace at the time of their offending. In line with the idea that offenders may have problems equally weighting primary goods, they found that just under half of their sample had an unbalanced good lives conception (i.e. at least one of the three goods given low priority). Barnett and Wood suggested that the reason why only half the sample had problems was the studies focused on only three goods.

Offenders also seem to find the good lives concept helpful to manage their behaviour. For instance, a recent study surveyed sex offenders on what aspects of a sexual offender treatment programme they found to be most important. Traditional modules such as victim empathy and relapse prevention concepts were rated as being important, but offenders also rated learning how to meet their needs in a more adaptive ways and creating more satisfying lives as being important (Levenson, Macgowan, Morin, & Cotter, 2009).

Support exists for the GLM's ability to address key limitations of the risk management approach. Lindsay, Ward, Morgan, and Wilson (2007) detailed two case

examples that demonstrated the principles of the GLM and RP in treating sexual offenders. They reported that the focus on improving quality of life as well as managing risk enhanced the engagement in treatment for both cases, and gave offenders a pro-social and meaningful life focus. At the time of publishing, both offenders had remained offence free for a period of five years.

Preliminary research has shown that the GLM could be an effective rehabilitation model for sexual offenders, although further research is required. In the next section, from criminology, the emerging area of desistance will be reviewed, including a description of the age-graded theory of informal social control (Laub & Sampson, 2003; Sampson & Laub, 1993).

### *Desistance*

In contrast to the above psychological approaches, theories from criminology have attempted to explain criminal behaviour as the result of social forces alone, and in the past have been more interested in examining why criminals turn to crime (Laub & Sampson, 2001). An increasing focus is on the question why criminals stop offending, an area of research termed desistance. Many different frameworks have been developed to explain why criminals desist from offending. A complete review of these frameworks is beyond the scope of this literature review (see Laub & Sampson, 2001, for a review), however one framework that most relates to the area of prisoner reintegration will be reviewed here. This framework is the age-graded theory of informal social control.

### *The Age-graded Theory of Informal Social Control*

Robert Sampson and John Laub (Laub & Sampson, 2003; Sampson & Laub, 1993) developed this framework. According to Sampson and Laub, persistence in or desistance from crime is the result of informal social controls, which are individuals, groups, or institutions separate from the government that bring about conformity, such as peer groups, employers and family. However, it is not just the presence or absence of the control that is important, but the level of attachment to them, that will influence persistence/desistence.

To test their theory, Sampson and Laub (1993) reanalysed the original data collected by Sheldon and Eleanor Glueck (1950). This sample consisted of adolescents classified as either delinquent or non-delinquent from the Boston area, matched according to age, IQ and ethnicity. Interviews with this sample took place at the ages of 25 and 32. Using the data collected by the Gluecks during these interviews, Sampson and Laub found that at both follow up periods, increases in job stability and marital attachment related to changes in criminal behaviour in the delinquent and non-delinquent groups. That is, individuals with high job stability or marital attachment were less likely to be arrested. Laub and Sampson (2003) followed up on their earlier work by interviewing 52 individuals from the same sample about their life history and classified them as persisters, desisters or intermittent offenders. Their analysis of these life history narratives showed that job stability, marital attachment and accommodation stability were all common aspects in the group of desisters.

While the sample used by Sampson and Laub had some sexual offenders, factors relating to desistance in sexual offenders were not specifically examined. Kruttschnitt,

Uggen and Shelton (2000) tested this theory on a sample of 556 sexual offenders. They found that those with stable employment histories were less likely to reoffend. For marital status, Kruttschnitt et al. found a negative relationship with recidivism, but this failed to reach statistical significance. A reason they gave for this finding was that their method of assessing marital status did not measure the duration or quality of the marriage.

Sampson and Laub (1993, 2005) suggest that marriage and employment influence desistance in a number of ways. First, they suggest that it leads to a “knifing off” of the past from the present. They give opportunities for new relationships that offer social support, growth, and new social networks. They lead to direct and indirect supervision and monitoring of behaviour. Fourth, they provide structured routines that lead to less criminal opportunities. Finally, they are situations that provide an opportunity for identity transformation.

This section has described models relating on why offenders stop offending. Two models from forensic psychology, the RNR model and the GLM focus on stopping offenders through interventions designed to reduce an offender’s risk of recidivism. Desistance is an area of criminology focusing on why offenders stop offending. The age-graded theory of informal social control explains desistance as occurring due to the level of attachment to informal social controls such as marriage and employment, and by giving opportunities to reconnect to such institutions may foster desistance. Next, we turn to research that has addressed the question of risk assessment, that is, identifying factors that can predict which individuals will reoffend.

### *Risk Assessment*

Assessing risk is an important task for clinicians working with offenders, due to its implications to the offender and the community. For the offender, risk assessments inform decisions with real-life consequences, such as those pertaining to sentencing, institutional security ratings, provision of treatment, release planning, and parole conditions. If the risk assessment overestimates an offenders risk (i.e., a high false-positive rate) it could result in unjustified extended periods of detainment or over-intensive treatment or supervision. For the community, underestimating risk (a high false-negative rate) could threaten their safety by failing to provide adequate treatment or supervision to high-risk individuals.

#### *First Generation Risk Assessments: Unstructured Clinical Judgement*

The first generation of risk assessment measures refers to subjective and unstructured clinical judgement. This type of risk assessment involves a professional reaching an opinion based on their training and assessment of relevant case information. Research designed to assess the accuracy of clinical judgements has shown that this method has poor interrater reliability and predictive accuracy (Grove & Meehl, 1996; Hanson & Bussière, 1998, Hanson & Morton-Bourgon, 2009). In particular, these judgements tend to overestimate risk for sexual offenders, as typically consideration is not given to reoffence base rates (Craig, Browne, Stringer, & Beech, 2004), which are lower for sexual offenders when compared to violent and general offenders.

### *Second Generation Risk Assessments: Actuarial Risk Instruments*

As discussed, research shows that by itself, clinical judgement is relatively poor at predicting recidivism and lead to the development of actuarial risk assessment measures. Actuarial measures use risk factors linked to recidivism by research. Research examining risk factors for recidivism identify two categories of risk factors, these being static and dynamic factors. Static risk factors are fixed or unchangeable and are often historical in nature and mark long-term propensities to engage in criminal behaviour (Hanson, 1998). In their meta-analytic review of sexual offender research, Hanson and Bussière (1998) examined risk factors associated with sexual recidivism from 61 studies. They found that static factors such as age and non-sexual crime history were reliable predictors of sexual offending, similar to other meta-analytic work on general offenders (e.g., Gendreau, Little, & Goggin, 1996). Hanson and Bussière also found that static factors relating to sexual deviance, like prior sexual offences, extrafamilial or stranger victims, related to sexual recidivism but not general recidivism.

Dynamic risk factors are variables associated with recidivism but which have the potential to change, such as substance abuse or antisocial peers. Dynamic risk factors are of particular clinical relevance because they can provide a target for treatment. Hanson and Morton-Bourgon (2005) updated the earlier meta-analysis conducted by Hanson and Bussière. Their study had a total sample size of 29,450 sex offenders from 82 studies. The major finding from this review echoed the earlier study, that being deviant sexual preferences and antisocial orientation were major predictors of sexual recidivism. Their review also identified some dynamic risk factors that were associated with recidivism

such as sexual preoccupation, general self-regulation problems, and employment instability.

It is possible to distinguish dynamic risk factors as either being stable or acute dynamic risk factors (Hanson, 1998; Hanson & Harris, 2001). Stable dynamic risk factors are expected to remain unchanged for long periods, while acute dynamic risk factors rapidly change and are related to the timing of offending. Hanson and Harris (2001) conducted interviews with community supervision officers to collect information on stable and acute dynamic risk factors for recidivist and nonrecidivist groups of sexual offenders matched according to offence history, victim type and jurisdiction. They found that recidivists' moods significantly decreased one month prior to their reoffending. Recidivists also had significant increases in anger, substance abuse, and access to victims in that same month.

Second generation risk measures are based on static risk factors. The most widely used actuarial measure for assessing sexual offender risk is the Static-99 (Hanson and Thornton, 2000). The Static-99 consists of 10 items: male victims, never married, noncontact offences, unrelated victims, any stranger victims, prior sex offences, current nonsexual violence, prior nonsexual violence, four or more sentences and age.

Assessing an actuarial measures ability to predict recidivism is typically done by calculating the area under the Receiver Operating Characteristic (ROC) curve (AUC; Rice & Harris, 1995). The advantage of the AUC as a measure of accuracy is that it is independent of the overall base rate, unlike correlations and other commonly used measures (e.g., percent correct; Rice & Harris, 1995). The ROC is displayed as a curve which plots where the proportion of recidivists who were predicted to reoffend (true

positives or hits) against the proportion of nonrecidivists who were predicted to reoffend (false positives). The area under the curve indicates the predictive accuracy of the measure. AUC values range from .5, indicating that prediction of the measure is no better than chance, to 1.0, indicating perfect prediction.

Barbaree, Seto, Langton, and Peacock (2001) compared the predictive accuracy of the Static-99, along with five other actuarial scales. The Static-99 significantly predicted sexual recidivism, with an AUC value of .70, along with three other measures. There were no statistically significant differences in predictive validity between the Static-99 and the other measures.

Despite second generation risk assessments being able to predict recidivism, they have their limitations. Second generation measures ignore dynamic variables despite their empirical validity (e.g., Hanson & Harris, 2000; Hudson, Wales, Bakker, & Ward, 2002). Static variables also do not offer any indication of appropriate targets for treatment. Related to this, static variables are not changeable and so do not inform on any change (for the better or worse) that an offender has made during treatment. Thus, subsequent research has examined the predictive validity of dynamic risk factors for sexual recidivism, and how these factors could be incorporated into risk assessments (Andrews & Bonta, 2006).

### *Third Generation Risk Assessments: Incorporating Dynamic Factors*

Third generation risk assessment measures systematically and objectively measure offender needs (Andrews & Bonta, 2006). This approach has two advantages: first, considering dynamic risk factors should increase predictive validity; second, the

identification of treatment targets that, once changed, may lead to reductions in recidivism risk.

Measures have been developed to assess static and acute dynamic risk factors. Hanson, Harris, Scott, and Helmus (2007) developed two instruments, called the STABLE-2007 and ACUTE-2007, with the purpose of measuring static dynamic and acute dynamic risk factors. The STABLE-2007 consists of 13 items relating to social influences, intimacy deficits, general self-regulation, sexual self-regulation, and cooperation with supervision. Items on the ACUTE-2007 relate to victim access, hostility, sexual pre-occupation, and rejection of supervision.

Hanson et al. (2007) found support for the predictive validity of their new measures. The STABLE-2007 had a significant AUC of .67, with scores being predictive of sexual recidivism after controlling for the Static-99. Combining the Static-99 and STABLE-2007 produced an AUC value of .76. Analysis of the ACUTE-2007 measure found that the sex or violence items provided significant incremental validity in predicting imminent (within 45 days) sexual recidivism after controlling for the Static-99 and the combined Static-99/STABLE-2007 estimate.

Another method of assessing dynamic risk uses psychometric test batteries designed to assess stable dynamic risk factors like sexual interests, pro-offending attitudes, emotional and social functioning (see Craissati & Beech, 2003, for a review). An example developed in New Zealand assesses dynamic risk amongst child molesters (Allan, Grace, Rutherford, & Hudson, 2007). This framework uses an individual-differences approach with data obtained from a battery of psychometric tests completed by child molesters as part of the assessment phase of the Kia Marama treatment

programme. Allan et al. (2007) developed this framework using a sample of 495 offenders. Exploratory factor analysis of this data yielded four primary dimensions in the psychometric battery – Social Inadequacy, Sexual Interests, Anger/Hostility, and Pro-Offending Attitudes. Allan and colleagues then examined the relationship between these four dimensions and recidivism by calculating factor scores for each offender, calculated as the average of the standardised scores for the tests loading onto each factor. All factors significantly predicted recidivism, with Sexual Interests and Pro-Offending Attitudes predicting recidivism to a higher degree than Social Inadequacy and Anger/Hostility.

Further analysis involved calculating an Overall Deviance score. This involved determining which individual factor scores an offender scored above the sample mean, with greater weight applied to Sexual Interests and Pro-Offending Attitudes than Social Inadequacy and Anger/Hostility. Allan and colleagues then tested the predictive validity of the Overall Deviance score. They found that the Overall Deviance score was significantly predictive of sexual recidivism with an AUC of .76 and was significant when controlling for static risk as measured by the Static-99. Finally, combining Overall Deviance with the Static-99 increased the AUC value to .81, which was greater than the predictive accuracy of both measures alone.

Although incorporating dynamic variables can increase prediction over and above measures based on static variables alone, these measures also have limitations. First, changes in dynamic variables should relate to reductions in recidivism. In their study, Hanson et al. (2007) noted that there was little change in the ratings on the STABLE-2007 measure at the 6-month intervals and these changes did not predict recidivism.

Additionally, Allan et al. (2007) found that pre-treatment assessment predicted recidivism years later following treatment, despite the treatment aiming to reduce these risk factors. This raises questions about whether these third generation measures are able to assess changes in dynamic risk over time and whether dynamic risk factors do change due to interventions and led to the design of fourth generation risk assessments, which attempt to identify changes in risk due to reductions in dynamic risk factors.

#### *Fourth Generation Risk Assessments: Including Changes in Risk Level*

Fourth generation risk measures attempt to incorporate changes in dynamic risk as a result of treatment with static and dynamic risk measured at pre-treatment. One example of a fourth generation measure is the Violence Risk Scale: Sexual Offender Version (VRS: SO; Olver, Wong, Nicholaichuk, & Gordon, 2007), which is based on the Violence Risk Scale (VRS; Wong & Gordon, 2006). The VRS: SO consists of seven static and 17 dynamic items, with the dynamic items selected because of their theoretical and empirical relevance to recidivism. These dynamic items fall into three domains: Sexual Deviance, Criminality, and Treatment Responsivity. The VRS: SO assesses change in each dynamic domain by using a modified application of the transtheoretical model of change (TTM; Prochaska, DiClemente, & Norcross, 1992). In the TTM, individuals move through five stages of change: precontemplation, contemplation, preparation, action and maintenance, with each stage characterised by different cognitive, experiential, and behavioural changes as they attempt to remediate problem areas. The VRS: SO operationalises these stages for the dynamic items, and progression from stage to stage demonstrates the extent to which the offender has improved by developing

positive coping skills and strategies that are stable, sustainable, and generalisable with respect to each dynamic item (Olver et al., 2007).

Two studies have attempted to validate the VRS: SO measure (Beggs & Grace, 2010; Olver et al. 2007). Olver et al. (2007) carried out their validation study on a sample of 321 male sexual offenders, who completed treatment in a maximum-security forensic unit. Olver et al. showed that the VRS: SO had good interrater reliability (with an intraclass correlation coefficient of .79) and concurrent validity, with the Static, pre- and post-treatment Dynamic, and pre- and post-treatment Total scores all having significant positive correlations with the Static-99. The next step was to test the predictive accuracy of the VRS: SO for sexual recidivism. Olver et al. found that the Static, pre- and post-treatment Dynamic and the pre- and post-treatment Total scale scores all significantly predicted sexual recidivism with AUC values ranging from .66 to .74. The Dynamic scale also demonstrated significant incremental validity over both the VRS: SO Static scale and the Static-99. Finally, Olver et al. examined whether VRS: SO Total Dynamic Change scores were predictive of sexual recidivism. They found that when controlling for static risk, pre-treatment dynamic risk and follow-up time, the change scores were predictive of sexual recidivism.

Beggs and Grace (2010) attempted to replicate the findings of Olver et al. (2007) on a sample of 218 child molesters who completed the Kia Marama programme. Replicating Olver et al., they found good interrater reliability and concurrent validity. Scores on the Static scale, pre- and post-treatment Dynamic scale, and pre- and post-treatment Total scale all significantly predicted sexual recidivism, with AUC values ranging from .67 to .80 and the Dynamic scale made a significant incremental

contribution after controlling for static risk. In another study, Beggs and Grace (in press) compared several different methods for assessing treatment outcome. These were the Standard Goal Attainment Scaling for Sexual Offenders (SGAS; Hogue, 1994), change according to the VRS: SO, and two measures of change derived from a self-report psychometric battery completed both before and after treatment (Allan et al., 2007). Beggs and Grace found that all measures significantly predicted sexual recidivism; AUCs ranged from .68 to .70. When the Static-99, Overall Deviance and VRS: SO Dynamic scales were controlled for, the two psychometric change measures were significantly related to recidivism in the expected direction (i.e., greater pro-social change linked with reduced recidivism), the VRS: SO change score approached significance, and the SGAS was not significantly related to recidivism. Thus Beggs and Grace's results show that measures of treatment outcome derived from both psychometric self-reports and structured clinical rating systems (VRS: SO) can provide significant incremental validity for risk prediction.

In summary, this section has shown that early attempts at predicting recidivism based on clinical judgement were poor. However, following generations of risk assessments based risk factors identified through empirical research show that it is possible to predict recidivism and focusing on both static and dynamic factors, it is possible to improve the ability of these instruments in predicting recidivism. The following section will review the literature relating to the area of prisoner reintegration.

### *Prisoner Reintegration*

As discussed previously, Hanson and Harris (2001) found that recidivists' had increases in substance abuse and access to victims in the month prior to their reoffending. These acute dynamic risk factors may be triggered by specific environment contexts, for example living near a park or in an area where drugs are easily available (Willis & Grace, 2008). Thus, to minimise these risk factors, the needs of sex offenders upon release need consideration. However, few studies have examined the specific reintegrative needs of sexual offenders so this section will look at research on the reintegrative needs of general offenders, and where possible, research involving sexual offenders. Reintegration research can fall into one of the following important reintegrative needs: individual, social, employment and accommodation needs (Graffam, Shinkfield, Lavelle, & McPherson, 2004). The literature relating to these four domains is summarised in the following sections.

#### *Individual Needs*

Mental and physical health problems are prevalent among prison populations (e.g., Graffam et al., 2004; Hammett, Roberts, & Kennedy, 2001). Marshall (2007) examined the prevalence of mental health problems among sexual offenders, and found a high prevalence of psychiatric disorders, such as mood, anxiety, substance abuse, and personality disorders. Therefore, it is important that these disorders are also the focus of treatment. For example, Abracen, Looman, DiFazio, Kelly, and Stripe (2006) divided a sample of sexual offenders who had completed a sexual offender treatment programme and had high levels of alcohol abuse into two groups based on whether they completed a

substance abuse treatment programme. There were no differences in sexual recidivism, but offenders who completed the substance abuse programme had lower rates of general recidivism. Yet, often only the offenders with the most serious problems that get treatment (Hammett et al., 2001; Lurigio, Rollins, & Fallon, 2004), which may lead to some offenders deliberately reoffending so they can return to prison to get treatment (Hammett et al., 2001).

### *Social Support*

While recidivism in general offenders is linked to associating with antisocial peers (e.g., Gendreau, et al., 1996), this is not the case with sexual offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). For sexual offenders, the presence or absence of prosocial support appears to be important in predicting recidivism (e.g., Hepburn & Griffin, 2004; Wakeling, Webster, Moulden, & Marshall, 2007).

For example, Hepburn and Griffin (2004) examined what influence that support from family and friends had on a sample of 258 child molesters on probation. Specifically, they looked at the effects on successful adjustment to probation, measured by time to a probation revocation petition (i.e., statement to the court that an offender is not abiding by conditions of probation) and time to an unsuccessful probation termination (return to prison). They found that probationers without the support of either family or friends were less likely to complete probation successfully without a return to prison than those with the support of either family or friends. In addition having the support of family and friends was better than having the support of either family or friends, though this difference was not statistically significant.

Sex offender registries or community notification (e.g., Levenson & Cotter, 2005b), in addition to the nature of their offending, mean making and maintaining support networks difficult for sexual offenders. Community-based support networks have started to emerge in response to the difficulties these offenders face. These groups recruit volunteers to provide support to a released offender. One example is the Circles of Support and Accountability (COSA) model. The COSA began in Canada in 1994 in response to community reaction against the release of a repeat, high-risk child sexual offender in their area. In response to the offender's pleas for assistance, a local pastor and members of his congregation gathered around to assist the offender in reintegrating into the community. Since then, the COSA model has spread internationally (Wilson, Huculak, & McWhinnie, 2002).

Wilson, Picheca, and Prinzo (2005) conducted two studies evaluating the COSA model. In the first study, they looked at the experiences of all key stakeholders (offenders, affiliated professionals, volunteer and non-volunteer community members). Overall, results showed that all key stakeholders responded favourably to the programme, with offenders feeling that the programme helped them to reintegrate into the community and remain free of crime and community members reporting increases in perceived safety. The second study examined the impact of the COSA model on recidivism for high-risk sexual offenders. The sample consisted of 60 subjects who participated in the COSA programme as well a matched comparison group. They found that the COSA participants had a significantly lower sexual recidivism rate over the follow-up period compared to the control group (5% versus 17%). Violent recidivism was also lower for

the COSA participants (15% versus 35%). These findings have since been replicated (Wilson, Cortoni, & McWhinnie, 2009).

### *Accommodation*

Accommodation is an important reintegrative need for offenders. Unstable accommodation is linked to recidivism in general offenders (Zamble & Quinsey, 1997). It also is crucial to obtain other reintegration needs for an offender released back into the community. Hirsch et al. (2002) found that accommodation was an important factor for ex-offenders in obtaining and maintaining employment. Offenders may also live with support people who will help them reintegrate into the community and act as supervisors to make sure an offender is less likely to reoffend in the future.

Although accommodation is an important factor for reintegration into the community, research has shown that offenders can often have difficulty finding it. Surveys of rental property owners in the United States showed that the majority did not accept applications from people with criminal histories (Clark, 2007). Residency restrictions can make it difficult for sexual offenders to find accommodation. For example, Zevitz and Farkas (2000) found from their interviews with sexual offenders that most had difficulty finding accommodation that met imposed requirements of residency restrictions. In addition, residency restrictions may lead to offenders having to leave accommodation they already have. After interviewing sexual offenders about residency restrictions, Levenson and Cotter (2005b) found that 22% of participants had to move out of a house they had owned, 28% had to move out of an apartment they had rented, and 44% were unable to live with supportive family members. Finally, the accommodation

that offenders may be able to reside in due to eligibility, residency restrictions or financial difficulties may be inappropriate. Graffam et al. (2004) in their interviews with offenders and professionals found that available accommodation for offenders were often in areas with high crime rates and drug use.

### *Employment*

Employment is an important reintegration need and has been shown to be related to recidivism for both general (Gendreau, et al., 1996) and sexual (Hanson & Morton-Bourgon, 2005) offenders. However, offenders face a number of challenges in obtaining and maintaining employment. As discussed previously, mental health issues are common amongst offenders and if left undiagnosed, untreated or not managed, pose a serious problem for an offender attempting to find and keep a job (Rakis, 2005).

While general offenders tend to have limited education and unstable work histories (Rakis, 2005), child sex offenders are more likely to be well educated and have stable employment histories (Seleznov, 2002; Sullivan & Beech, 2002). Yet the nature of their offending may make attaining employment difficult, meaning that they may have to take a job below their levels of education or experience (Robbers, 2009). Due to the nature of their offending, parole conditions can also hamper efforts. Schaefer, Friedlander, Blustein, and Maruna (2004) interviewed eight convicted child sex offenders about their work experiences following disclosure of their offending. Offenders reported that conditions of parole, such as restricting the geographical location of employment and preventing employment in occupations with potential access to children, made finding a job difficult.

Prejudice on the part of potential employers may pose another obstacle (Rakis, 2005). For instance, employers are often unwilling to hire ex-offenders (Holzer, Raphael, & Stoll, 2003). Sexual offenders can face particular difficulties as community notification and sex offender registries allow the public to identify offenders, allowing them to put pressure on employers so they do not employ offenders (Albright & Denq, 1996; Levenson & Cotter, 2005a; Tewksbury, 2005; Zevitz & Farkas, 2000).

### *Reintegration Planning and Recidivism*

Overall, research suggests that the reintegrative needs of offenders fall into four categories, individual needs, social support, accommodation and employment. Offenders who are not able to obtain these needs are more likely to reoffend. Thus, planning for these needs prior to release may be an effective means of reducing recidivism. Two recent studies by Willis and Grace (2008, 2009) were the first to examine reintegration planning systematically, and its relationship to recidivism.

Willis and Grace (2008) started by developing a coding protocol to measure the quality and comprehensiveness of reintegration planning for sex offenders. This protocol assessed an offender on the following items, with the range of scores in brackets: accommodation (0-3), social support (0-3), idiosyncratic risk factors (0-3), employment (0-3), GLM secondary goods (0-1) and motivation to follow through with release plans (0-1). Adding scores on these items obtained a total score together, ranging from zero to 14. This protocol was then retrospectively applied to groups of recidivists ( $n = 39$ ) and nonrecidivists ( $n = 42$ ) who had been individually matched on static risk level and time

since release. Interrater reliability for the reintegration protocol had an average Cohen's  $\kappa$  of .83.

Willis and Grace hypothesised that recidivists would have poorer release planning than nonrecidivists. Mean scores on all items except for the idiosyncratic risk factors were higher for nonrecidivists, with mean scores for accommodation, employment, GLM secondary goods and total scores being significantly greater for nonrecidivists, supporting their hypothesis.

However, recidivists in their study had significantly lower intelligence scores and greater Overall Deviance scores as assessed by psychometric measures of dynamic risk factors (Allan et al., 2007). Thus, an effect of reintegration planning on recidivism might have been confounded by differences in intelligence and Overall Deviance. Willis and Grace therefore tested whether differences in planning between recidivists and nonrecidivists remained significant while controlling for intelligence and Overall Deviance. With intelligence controlled, Willis and Grace found that the item scores for accommodation and GLM secondary goods remained significantly higher for nonrecidivists, while differences in employment and total score were no longer significant. With Overall Deviance scores controlled, accommodation remained significantly different and the GLM secondary goods item approached significance. With both intelligence and Overall Deviance simultaneously controlled for, only accommodation remained significant. They concluded that overall, their results suggested that poor planning for reintegration was a risk factor for sexual recidivism.

Willis and Grace (2009) followed up on their original study by attempting to validate their result of poor release planning as a risk factor for sexual recidivism with an

independent sample of child molesters released from the Te Piriti programme in Auckland, New Zealand. A secondary aim was to improve the original coding protocol by using revised items for social support and community-based treatment planning as these items had not shown significant differences in the original study. Willis and Grace revised the social support item to differentiate support networks of one person from networks of multiple people from the same system, and included the total number of people in an offender's network.

The idiosyncratic risk item of the Willis and Grace (2008) study examined whether high-risk situations and warning signs for an offender were identified and whether any attempt at minimising them had been made through community-based treatment planning. Scores on this item in the earlier study were not significantly different for recidivists and nonrecidivists. One reason given by Willis and Grace (2009) was that although some risk factors had been identified for community treatment, there were no specific attempts at minimising exposure to unsupervised access to children. Thus, a separate item was included to assess attempts at minimising unsupervised access to children. In addition to this change, community-based treatment referrals were also recorded separately for each participant and grouped according whether they were conditional (e.g., at the request of an offender's probation officer) or unconditional (e.g., as a condition of parole).

Willis and Grace (2009) applied the original and revised reintegration planning protocols to a sample of recidivist ( $n = 30$ ) and nonrecidivist ( $n = 30$ ) child molesters who were matched on static risk level and time at risk. Interrater reliability was assessed,

returning an average Cohen's  $\kappa$  of .78 for the original and .77 for the revised items. This demonstrated similar reliability to that of Willis and Grace (2008).

Comparing reintegration planning scores for recidivists and nonrecidivists on the original items, means for nonrecidivists were significantly greater for the social support and employment items, as well as the total score overall. Thus, Willis and Grace (2009) replicated their earlier result and showed that reintegration planning was poorer overall for recidivists. Of the revised items, only social support (not the total number of support) was significantly greater for nonrecidivists. Differences between extrafamilial and intrafamilial offenders were not significant.

However, differences in reintegration planning between recidivists and nonrecidivists may have been confounded by additional variables such as dynamic risk factors, static risk level or IQ. To see if this was the case, Willis and Grace calculated correlations between reintegration planning items, IQ and the Allan et al. (2007) dynamic risk scores. Reintegration items generally correlated negatively with dynamic risk, but of the total 45 correlations, only three-reached statistical significance: Pro-Offending Attitudes and accommodation, Anger/Hostility and employment, and Sexual Interests and unsupervised access to children. Correlations between reintegration items, static risk level and IQ did not reach significance. Overall, this shows that dynamic risk, static risk and IQ did not confound differences in reintegration planning. These results support the conclusion reached by Willis and Grace (2008): Reintegration planning was poorer for recidivists than nonrecidivists, and not confounded by differences in static and dynamic risk or IQ.

Willis and Grace (2009) tested a further hypothesis, that if reintegration planning is a causal factor for recidivism, then poor planning should be associated with a decreased time to offending (i.e. offenders with poor plans would reoffend faster). To test this hypothesis, Willis and Grace conducted survival analyses using the data from the two studies, with each set of data analysed separately and combined. Odds ratios were computed as an effect size for individual items. When the data from the original study were analysed this way, accommodation, GLM secondary goods, motivation, and the total score all significantly predicted recidivism with odds ratios less than one, meaning that decreases in item scores were associated with an increased speed of reoffending. Using data from the second study, accommodation, original and revised social support items, idiosyncratic risk factors, employment and the total score were significant predictors with odds ratios also less than one. For the pooled sample accommodation, social support, and employment planning were significant predictors.

Willis and Grace then attempted to identify the best reintegration-planning model for predicting recidivism for the two separate and combined samples. To do this, items with significant odds ratios were used to calculate AUC values. For the data from the first study, the combined social support, employment GLM secondary goods, and accommodation items provided the best predictive model with an AUC of .71. For the data from Willis and Grace (2009), the revised social support item with accommodation and employment items produced the best predictive model with an AUC value of .78. The accommodation, employment and social support items combined to produce the best model for the pooled data with an AUC value of .71. This value for the pooled data is similar to AUC values obtained from measures of static risk (Barbaree et al., 2001).

### *The Current Study*

Although Willis and Grace's studies provide some evidence of the importance of reintegration planning, important questions remain unanswered. Thus, the primary goal of the present study was to evaluate the reliability and predictive validity of the reintegration protocol developed by Willis and Grace (2008, 2009) with a larger, more representative sample than those studied by Willis and Grace. This will provide information about how reintegration plans vary for the sample as a whole and will include comparing the results for intrafamilial and extrafamilial offender subtypes. A secondary aim was to assess how static and dynamic risk factors, intelligence and psychopathy and treatment outcome related to reintegration planning. The purpose here was to identify which offenders might require more assistance and monitoring in developing successful plans for reintegration, and to test whether reintegration planning accounted for significant variance in predicting recidivism after controlling for measures of static and dynamic risk. To accomplish this, we administered the reintegration protocol developed by Willis and Grace (2008, 2009) to a sample of child molesters who completed treatment at the Kia Marama programme. We used the same sample as Beggs and Grace (2008, 2010, in press) so that we could assess the relationship between reintegration planning and static and dynamic, psychopathy, intelligence and treatment outcome.

## METHOD

### *Participants*

Participants in this study were adult males who had completed a 32-week prison-based group treatment programme for men who have sexually offended against children while incarcerated at the Kia Marama Special Treatment Unit at Rolleston Prison, New Zealand. All had provided written consent for their file information to be used for research and evaluation purposes.

The initial sample consisted of 218 offenders, who completed the Kia Marama programme between 1993 and 2000, and for whom treatment outcome had been scored retrospectively according to the Standard Goal Attainment Scaling for Sexual Offenders (SGAS; Hogue, 1994), VRS: SO and psychometric change by Beggs and Grace (in press). Of these 218 cases, 14 files could not be located. The reintegration planning protocols developed by Willis and Grace (2008; 2009) were then applied to the remaining 204 cases. Eight of these case files did not have the appropriate reports to allow for coding of reintegration plans, leaving a final sample size of 196. Sample characteristics are described in the Results section.

### *Measures*

#### *Reintegration Planning Protocol*

This study used the reintegration planning protocols developed by Willis and Grace (2008, 2009). However, the idiosyncratic risk factor, community-based treatment referral and unsupervised access to children items were not included. This was because these items did not differentiate between recidivist and nonrecidivist offenders in the

previous two studies and the practice at Kia Marama has been to make sure offenders do have assistance in these regards.

The items used in this study from the original scale are described below, along with the scale on which each item was scored:

1. Accommodation: Measures the extent of accommodation planning with proposed type of accommodation being recorded. (Scored from 0 to 2).
2. Social support: Measures whether a social support network had been established, and if so, how many systems it comprised. (Scored from 0 to 3).
3. Employment: Measures the extent of employment planning. (Scored from 0 to 3).
4. GLM secondary goods: Indicated whether secondary goods were present in an offender's reintegration plan. (Scored from 0 to 1).
5. Motivation: Measures motivation to follow through with post-release plans, as stated by the therapist. (Scored from 0 to 1).

Items from the revised protocol are summarised below followed by the scale on which each item was scored:

6. Social support: This item was similar to the original social support item, but differentiated support networks consisting of one person from networks of multiple people who were from the same system. (Scored from 0 to 4).
7. Social support N: This item measured the number of people in an offender's planned support network.

## *Risk Measures*

### *Static-99*

The Static-99 (Hanson & Thornton, 2000) was used to measure static risk. The Static-99 is an instrument designed to assess risk of recidivism in sex offenders. It consists of 10 items primarily relating to offence history. Each of these items is rated on a 0 to 1 or 0 to 3 scale. The total maximum score is 12, with the overall score being divided into four risk bands (0 or 1 = low, 2 or 3 = medium low, 4 or 5 = medium high, 6+ = high). The Static-99 has consistently been shown to have good predictive accuracy for sexual recidivism (Barbaree et al., 2001).

### *Psychometric Dynamic Risk*

Psychometric dynamic risk was assessed using the Allan et al. (2007) factor scores, as detailed in the Introduction chapter. Standardised scores were calculated for variables loading on the Social Inadequacy, Sexual Interests, Anger/Hostility, and Pro-Offending Attitudes factors, using the means and standard deviations from Allan et al.'s sample, and then the standardised scores for each factor were averaged to produce a factor score. An estimate of overall dynamic risk level was calculated using Overall Deviance scores, which combined factor scores, giving double weight to Sexual Interests and Pro-Offending Attitudes (see Allan et al., 2007, Equation 1). Higher scores on each factor represent a higher dynamic risk level.

### *VRS: SO*

The VRS: SO (Olver et al., 2007) was used to assess both static and dynamic risk. The VRS: SO is designed to assess risk, predict recidivism, measure and link treatment

changes to recidivism, and inform the delivery of treatment (Olver et al., 2007). The VRS: SO consists of a 7-item static scale and a 17-item dynamic scale with items on the dynamic scale loading onto three factors - Sexual Deviancy, Criminality, and Treatment Responsivity. Ratings according to the VRS: SO yield several component scores: VRS: SO Static; pre-treatment Dynamic and Total scores (i.e., Static plus pre-treatment Dynamic); post-treatment Dynamic and Total scores, and pre- and post-treatment scores on each of the three Dynamic factors. VRS: SO Total scores can also be translated into four risk categories: Low (score of 0-20); Moderate-Low (21-30); Moderate-High (31-40); and High (41-72). Dynamic items are given a rating of 0-3 prior to treatment, with higher scores being indicative of more risk.

#### *Treatment Outcome*

##### *SGAS*

A modified version of Hogue's (1994) Standardised Goal Attainment Scale (SGAS), as used by Beggs and Grace (in press), was used. The SGAS measures the extent to which an offender has achieved specific treatment goals, and the version used here included the following six goals: 1) Show empathy and insight into victim issues; 2) Accept personal responsibility for offending; 3) Recognise cognitive distortions; 4) Understand offence chain; 5) Identify relapse prevention concepts; and 6) Motivation to change behaviour. Participants were rated on their level of attainment of each goal according to a five-point scale ranging from -2 to +2 (with a score of zero representing a minimally acceptable level of goal attainment), resulting in a Total SGAS score ranging from -12 to +12. Beggs and Grace (in press) showed that this modified version of the

SGAS significantly predicted sexual recidivism in the present sample, such that offenders with higher SGAS scores were less likely to reoffend, with an AUC value of .66,  $p < .01$ .

#### *VRS: SO Change*

The VRS: SO assesses progress in treatment using the Stages of Change Model (Prochaska et al., 1992) which consists of five stages: precontemplation, contemplation, preparation, action, or maintenance. Before treatment each dynamic item rated 2 or 3 are noted as treatment targets and an individual is then given a stages of change baseline rating at pre-treatment to assess motivation and readiness for change and items which are scored a 0 or 1 are not assessed. Dynamic items noted as treatment targets are then rated post-treatment. Change is assessed by comparing the stages of change rating at pre-treatment with that at post-treatment. For each treatment target, movement from one stage to the next is score as a 0.5-point reduction in the pre-treatment rating. The exception is movement from the precontemplation to contemplation stage due to the absence of any behavioural change. A total change score is arrived at by summing up all point deductions across the dynamic items. Beggs and Grace (in press) showed that VRS: SO Total Dynamic Change scores significantly predicted reductions in sexual recidivism, with an AUC of .70,  $p < .01$ .

#### *Psychometric Change*

The final two treatment outcome measures were based on the psychometric dynamic risk measures of Allan et al. (2007) as detailed in Beggs and Grace (in press). The first measure used was an overall change score obtained by first calculating

standardized residual change scores for each factor of the psychometric dynamic risk measure. The reason for this procedure was that change scores were positively correlated with pre-treatment scores. To control for this correlation, change scores were regressed on the pre-treatment scores and the residuals were standardised for each variable. Overall change was calculated by summing average scores across factors. Beggs and Grace (in press) showed that the overall change scores significantly predicted sexual recidivism, with an AUC value of .68,  $p < .01$ .

Beggs and Grace (in press) also computed measures of clinically significant change for each dynamic risk factor. Clinically-significant change (CSC) refers to whether, at post-treatment, an offender's scores on the psychometric tests are indistinguishable from normative (i.e., non-offender) samples (Evans, Margison, & Barkham, 1998). To calculate clinically significant change, a cut-off score (a mid point between the distributions of normative and non-normative scores) is first calculated. For each offender and measure, it was determined whether the pre- and post-treatment scores were: a) above and below the cut-off, respectively; b) below and below; c) above and above; or d) below and above. Offenders in categories a) and b) were defined as having demonstrated "clinically significant change" on the measure in question, because the post-treatment scores were below the cut-off. Beggs and Grace (in press) reported that clinically significant change, averaged across variables and factors, predicted reductions in sexual recidivism, with an AUC value of .66,  $p < .001$ .

### *Psychopathy*

The PCL-R was administered to all participants as part of the post-treatment assessment at Kia Marama. The PCL-R consists of 20 items rated on a three-point scale ranging from 0 to 2, resulting in a maximum score of 40. According to Hare (1991), psychopathy is most usefully viewed as a dimensional construct, with the total score reflecting the extent that the individual matches the description of a prototypical psychopath. When a categorical conceptualisation is required, cut-off scores of 25 or higher are seen as being appropriate for diagnosing a psychopathic personality (Hare, Clark, Grann, & Thornton, 2000; Rice, Harris & Cormier, 1992).

### *Intelligence*

Intelligence is routinely measured as part of the pre-treatment assessment battery at Kia Marama for the purpose of ascertaining a participant's ability to cope with the content of the treatment program. IQ was assessed using the Wechsler Abbreviated Scale of Intelligence (WASI; Wechsler, 1999), and prior to the development of the WASI, a four-subtest short version (Picture Completion, Block Design, Information and Arithmetic) of the Wechsler Adult Intelligence Scale – Revised (WAIS-R; Reynolds, Willson, & Clark, 1983). Both tests have been shown to have good reliability and validity as screening tools for estimating full-scale intelligence (Reynolds et al., 1983; Wechsler, 1999).

### *Recidivism*

Criminal history information for all men in the sample was obtained from the computer database maintained by the New Zealand Department of Corrections as of July 1, 2008. Convictions for sexual, violent, or general offences that occurred post-release were recorded. Sexual recidivism was defined according to the Static-99 scoring criteria for Category 'A' offences, that is, an offence with an identifiable victim (Harris, Phenix, Hanson, & Thornton, 2003). Category 'B' offences (i.e., no identifiable victim) were excluded, except for possession of child pornography. Violent recidivism was recorded when the offender had been convicted for a non-sexual offence against a person (e.g., assault, robbery, kidnapping). General recidivism was recorded for offences that were neither sexual nor violent (e.g., burglary). The time at large prior to each reconviction, or to the end of the follow up period, was calculated for each offender. The average follow-up time was 11.08 years (minimum of one month and a maximum of 14 years).

### *Procedure*

Files held by the Department of Corrections Psychological Service were obtained for each participant, and the report for each participant written by Kia Marama staff to the CPS upon release was rated using the coding protocols developed by Willis and Grace. These reports contained details relating to an offender's conviction, a summary of assessment findings and treatment comes, an indication of current risk level, a list of high-risk situations and warning signs and an outline of release plans.

The sample used in this study and previously been used by Beggs and Grace (2008; 2010, in press). This meant that scores on the psychopathy, intelligence, static and

dynamic risk, and treatment outcome measures as well as recidivism outcomes had previously been scored and recorded.

To assess reintegration planning for the sample, case files of the participants were coded by the author, with a research assistant coding approximately 11% of these so a measure of interrater reliability could be obtained. Data coders rated release plans independently of each other and were blind to recidivism outcomes while coding reintegration plans. For each report, data coders were instructed to:

1. Read the report in its entirety before conducting any ratings,
2. Reread the report and record ratings (coders were instructed to be conservative in any event of uncertainty), and
3. Ensure that all ratings and comments relating to qualitative aspects of release planning have been recorded.

All disagreements between coders were resolved by consensus. Statistical analyses were conducted using SPSS (Version 17).

## **RESULTS**

### *Sample Characteristics*

The men were aged between 19 and 74 years at entry into the Kia Marama programme, with an average age of 41.7 years. The average IQ of the sample was 99.26 (SD = 14.61), while the average Static-99 score was 2.18 (SD = 2.01), equating to a risk band of medium-low according to Hanson and Thornton (2000). The average PCL-R score for the sample was 8.12 (SD = 7.20). More than half (57%; n = 112) of the sample

consisted of intrafamilial offenders whose victims were exclusively family members, while 43% ( $n = 84$ ) were extrafamilial offenders who had at least one unrelated victim.

### *Interrater Reliability*

To measure interrater reliability of the coding protocol items, release planning scores for a randomly selected 11% of cases ( $n = 25$ ) were assessed independently by two data coders. Cohen's  $\kappa$  values for items from the original and revised protocols are shown in Table 1 for all but one of the items. Cohen's  $\kappa$  could not be calculated for accommodation because of low variability, so the percentage of agreement is reported. Raters agreed on 24 of the 25 cases (96%) for this item. The employment and GLM secondary good items initially had Cohen's  $\kappa$  values of .51 and .34 respectively, due to disagreement between the raters. These were resolved by consensus and Cohen's  $\kappa$  recalculated. The revised values for employment and the GLM secondary goods items were .83 and .88 respectively, are also shown in Table 1. Overall, the coding protocol demonstrated good reliability, with an average Cohen's  $\kappa = .89$ . Interrater reliability is comparable to that reported by Willis and Grace (2008), who reported an average Cohen's  $\kappa = .83$ .

Table 1

*Obtained Kappa Values for the Coding Protocol*

Reintegration Items	$\kappa$
Original Items	
Accommodation	.96
Social Support	.92
Employment	.83
GLM Secondary Goods	.88
Motivation	.91
Revised Items	
Revised Social Support	.93
Social Support N	.86

*Distribution of the Reintegration Protocol Item and Total Scores*

We conducted a series of exploratory analyses to provide a description of scores on the reintegration protocol for the sample. Table 2 shows the distribution of scores for each item, as well as the mean and standard deviations for these items and the reintegration planning total score. Due to a change in the format of release reports, 81 cases did not have information available to code the motivation item. For these cases, motivation scores were imputed as the average of the remaining items. The total score was calculated by summing the accommodation, employment, motivation, GLM secondary goods and revised social support items, yielding a score that potentially ranged from 0 to 11.

Table 2

*Distribution of Scores, Means and Standard Deviations for Reintegration Items*

Reintegration Items	0	1	2	3	4	Mean	SD
Accommodation	4.08%	3.57%	92.35%	n/a	n/a	1.88	0.43
Social Support	5.61%	0.51%	60.71%	33.16%	n/a	2.21	0.72
Employment	46.94%	31.12%	14.80%	7.14%	n/a	0.82	0.94
GLM Secondary Goods	71.43%	28.57%	n/a	n/a	n/a	0.29	0.45
Motivation	3.06%	55.61%	n/a	n/a	n/a	0.79	0.29
Revised Social Support	5.61%	0.51%	14.29%	46.43%	33.16%	3.01	1.00
Social Support N	n/a	n/a	n/a	n/a	n/a	3.57	2.68
Total Score	n/a	n/a	n/a	n/a	n/a	6.79	2.05

First, we examined the total reintegration scores. These ranged between 0 and 11, with a mean total reintegration score of 6.79 ( $SD = 2.05$ ). The corresponding histogram is shown in Figure 1. Total reintegration scores were negatively skewed, with a skewness of  $-.90$  ( $SE = .17$ ) and kurtosis of  $1.62$  ( $SE = .35$ ). A Kolmogorov-Smirnov test found that the distribution of reintegration total scores was significantly different from normal,  $D(196) = 1.56, p < .05$ . The positive kurtosis resulted from having relatively more of the cases in the middle than expected based on a normal distribution, and relatively few in the tails. The majority (64%) of the sample scored between 6 and 8 on the reintegration protocol, and the overall average total score was 61.7% of the maximum possible score.

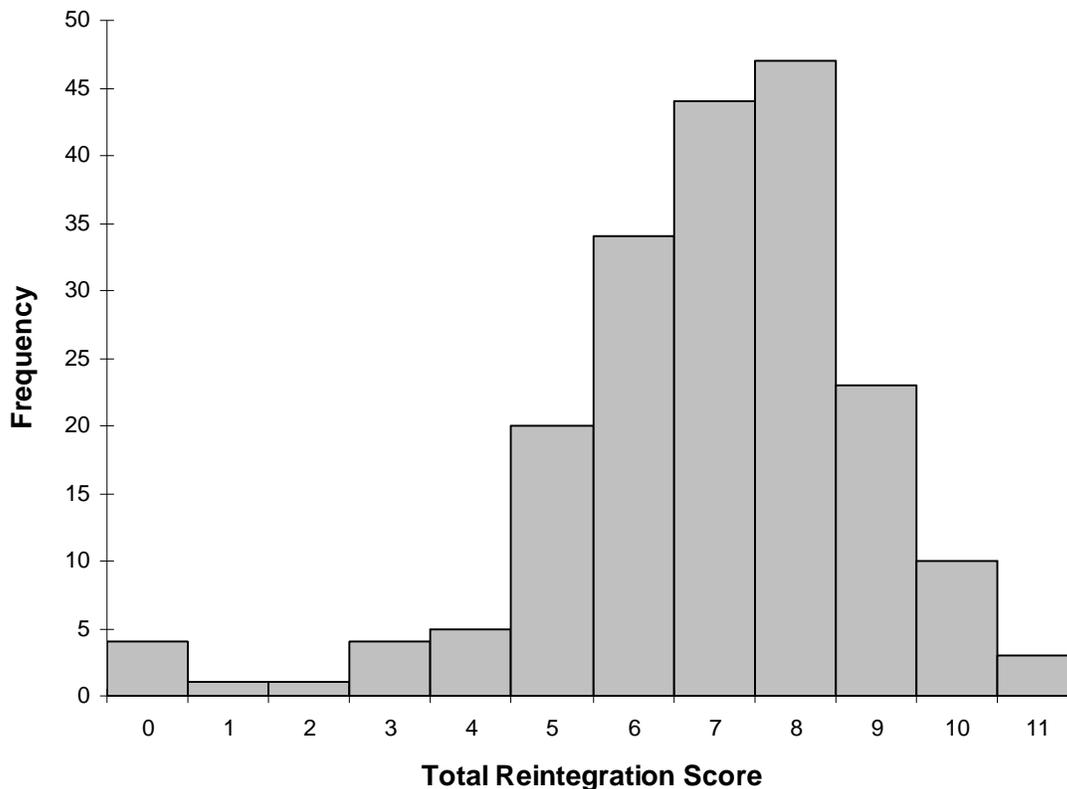


Figure 1. Histogram of total reintegration scores showing the number of participants obtaining each total score.

The mean accommodation score was close to the maximum, with 92% of the sample scoring the maximum on this item. It is a requirement of release that accommodation be planned, which explains the low amount of variance found in this item. In addition, offenders are released back to their original community whenever possible, to maximize the likelihood of adequate social support. This policy is reflected in the mean scores of the social support items, with roughly 93% of participants scoring a two (having a support network of at least one system) or better on both social support items. The average number of support persons available to offenders was close to four ( $M = 3.57$ ), although there was substantial variability ( $SD = 2.68$ ) and a range between 0

and 16. The majority of offenders (roughly 53%) scored at least a one on the employment item indicating that at least some planning had occurred for a job after their release. However the majority of these offenders only had plans with no concrete steps taken toward securing employment, resulting in an average close to one ( $M = .82$ ). The majority of offenders (71%) did not have any GLM secondary goods described which led to the low average for this item ( $M = .29$ ). This is not surprising given that the GLM was not developed when the sample received treatment and thus was not emphasized in the content of the programme. The average motivation score was also relatively high ( $M = .79$ ). As discussed previously, 81 cases did not have information available to code the motivation item. This meant that for these cases, whether an offender was motivated to follow through with their release plan was not indicated in the report, so the motivation item was unable to be coded. In this case, their motivation was imputed as the average of the remaining item values. Of the remaining cases where motivation could be coded, 95% were scored as being motivated to follow through with release plans. To summarize these results, at release the average offender would have accommodation confirmed, plans regarding work options, an established support network of approximately four people and demonstrated the motivation to follow through with his release plan.

#### *Item-total Correlations*

Item-total correlations between each item in the reintegration protocol and the total reintegration score were calculated and are presented in Table 3. All correlations between items on the reintegration planning protocol and total score were positive and all reached significance. Individual item-total correlations ranged from .37 for the GLM

secondary goods item, to .80 for the revised social support item. This suggests that none of the items were spurious and should be deleted from the total score. Overall, offenders scoring highly on each individual item tended to have higher overall reintegration scores.

Table 3

*Item-Total Correlations for Reintegration Items*

Reintegration Items	Item-Total Correlation
Accommodation	.55**
Social Support	.74**
Employment	.66**
GLM Secondary Goods	.37**
Motivation	.64**
Revised Social Support	.80**
Social Support N	.53**

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

*Comparing Intrafamilial and Extrafamilial Offenders*

A comparison of reintegration scores between intrafamilial and extrafamilial offenders was conducted to determine whether the reintegration needs of these offender subtypes differed. The mean scores and standard deviations for each item on the reintegration protocol are shown separately for both intrafamilial and extrafamilial recidivists and nonrecidivists in Table 4.

A two way factorial ANOVA was conducted for each item, with offender type (intrafamilial or extrafamilial) and outcome (recidivist or nonrecidivist) as factors. Significant differences between recidivists and nonrecidivists were found for the accommodation,  $F(1,192) = 4.46, p < .05$ , and revised social support,  $F(1,192) = 4.70, p < .05$ , items as well as total reintegration scores,  $F(1,192) = 5.69, p < .05$ , with

nonrecidivists scoring more highly than recidivists. No significant differences were found between intrafamilial and extrafamilial offenders. However, differences for the accommodation and number of social support persons both approached significance,  $F(1,192) = 3.83, p = .05$  and  $F(1,192) = 3.26, p = .07$ , with extrafamilial offenders scoring more highly than intrafamilial offenders on these items.

Table 4

*Reintegration Protocol Means Ratings and Standard Deviations for Intrafamilial and Extrafamilial Recidivists and Nonrecidivists*

Item	Recidivists		Nonrecidivists	
	Intrafamilial <i>n</i> = 8	Extrafamilial <i>n</i> = 18	Intrafamilial <i>n</i> = 104	Extrafamilial <i>n</i> = 66
Accommodation	1.50 (0.93)	1.89 (0.47)	1.90 (0.36)	1.89 (0.43)
Social Support	1.88 (0.83)	2.11 (0.90)	2.23 (0.66)	2.26 (0.75)
Employment	0.75 (1.17)	0.50 (0.71)	0.88 (0.94)	0.82 (0.96)
GLM Secondary Goods	0.25 (0.46)	0.11 (0.32)	0.29 (0.46)	0.33 (0.48)
Motivation	0.75 (0.46)	0.74 (0.28)	0.81 (0.28)	0.77 (0.28)
Revised Social Support	2.38 (1.19)	2.78 (1.26)	3.06 (0.91)	3.08 (1.03)
Social Support N	1.50 (0.93)	3.83 (3.31)	3.70 (2.60)	3.55 (2.70)
Total Score	5.63 (3.11)	6.02 (1.83)	6.94 (1.88)	6.90 (2.18)

*Note.* Standard deviations are in parentheses.

Analysis of interactions found two significant interactions. The first interaction was in the accommodation item, with extrafamilial recidivists receiving higher ratings than intrafamilial recidivists, and no differences between extrafamilial and intrafamilial nonrecidivists,  $F(1,192) = 4.24, p < .05$ . The second interaction was found in the in the number of social support people item, again extrafamilial recidivists received higher

ratings than intrafamilial recidivists, with no differences between extrafamilial and intrafamilial nonrecidivists,  $F(1,192) = 4.27, p < .05$ .

### *Correlations between Reintegration Planning and Other Measures*

To address the question of how reintegration planning might be related to other important variables relevant for risk assessment and treatment of sex offenders, we conducted a series of correlational analyses. These included the reintegration item and total scores, as well as measures of static and dynamic risk, treatment outcome, psychopathy and intelligence. Results are shown in Table 5.

#### *Static Risk*

The Static-99 negatively correlated with all items in the reintegration protocol, with  $r$ 's ranging from  $-.02$  to  $-.10$ , but none reached significance, including the correlation with the reintegration total score ( $r = -.10, p = .15$ ). Correlations with the VRS: SO Static scale were also negative but stronger overall, and some reached significance. The VRS: SO Static scale significantly correlated with the employment ( $r = -.15, p < .05$ ) and revised social support ( $r = -.18, p < .05$ ) items and approached significance with the original social support ( $r = -.13, p = .06$ ) and motivation items ( $r = -.13, p = .06$ ). The VRS: SO Static scale negatively correlated with total reintegration planning score ( $r = -.19, p < .01$ ). Overall, these results suggest that reintegration planning quality was negatively correlated with static risk factors, although the relationships were not particularly strong.

Table 5

*Correlations between the Reintegration Protocol, Reintegration Total Score, and Measures of Static and Dynamic Risk, Treatment Outcome, Intelligence and Psychopathy*

Measures	Reintegration Items							
	Accom	Social	Employ	GLM Sec	Mot	Rev. Soc	Social N	Total
Static Risk								
STATIC-99	-.03	-.05	-.10	-.02	-.05	-.10	-.03	-.10
VRS: SO Static Scale	-.12	-.13	-.15*	.05	-.13	-.18*	-.05	-.19**
Psychometric Dynamic Risk								
Social Inadequacy	.06	-.02	-.09	-.09	-.04	-.05	-.11	-.07
Sexual Interests	-.00	-.14*	-.04	.00	-.10	-.16*	-.23**	-.11
Anger/Hostility	-.06	-.07	-.04	.00	-.04	-.09	-.08	-.08
Pro-Offending Attitudes	.00	-.03	-.02	-.11	.01	-.05	-.07	-.06
Overall Deviance	.02	-.11	-.07	-.08	-.04	-.15*	-.22**	-.12
VRS: SO Scales								
Sexual Deviance (Pre)	-.07	-.12	-.11	.04	-.08	-.14	-.12	-.13
Criminality (Pre)	-.22**	-.22**	-.22**	-.04	-.22**	-.27***	-.24***	-.32***
Treatment Responsivity (Pre)	-.18*	-.06	-.06	-.17*	.00	-.10	-.07	-.15*
Dynamic (Pre)	-.22**	-.21**	-.20**	-.06	-.18*	-.26***	-.22**	-.31***
Total Score (Pre)	-.20**	-.20**	-.20**	-.02	-.18*	-.26***	-.17*	-.29***

Measures	Accom	Social	Employ	GLM Sec.	Mot	Rev. Soc	Social N	Total
Treatment Outcome								
SGAS	.20**	.13	.20**	.16*	.24**	.17*	.13	.29***
VRS: SO Change Scores								
Sexual Deviance	.14	.01	.09	.11	.06	.06	.11	.14
Criminality	-.05	-.17*	-.07	-.01	.04	-.19**	-.14	-.14
Treatment Responsivity	.19**	.06	.09	.09	.20**	.09	.02	.17*
VRS: SO Motivation	.07	.04	.07	.22**	.10	.06	.07	.14
Overall Change Score	.15*	-.03	.08	.11	.08	.00	.01	.11
Psychometric Change								
Residual Change								
Social Inadequacy	-.06	.09	.13	.14	.04	.09	.18*	.13
Sexual Interests	-.11	.03	.03	-.08	-.03	.02	.02	-.02
Anger/Hostility	-.07	.04	-.01	-.05	-.11	.01	.05	-.04
Pro-Offending Attitudes	-.05	.07	.14*	.19*	.06	.08	.11	.15*
Average Change	-.11	.08	.11	.06	-.01	.07	.12	.07
Clinically Significant Change								
Social Inadequacy	-.08	.08	.13	.14	-.02	.07	.14	.11
Sexual Interests	-.08	.05	.07	-.06	.01	.06	.09	.04
Anger/Hostility	-.08	.07	.12	.13	.05	.07	.08	.11
Pro-Offending Attitudes	-.03	.05	.12	.13	.05	.07	.08	.11
Average Change	-.09	.09	.13	.08	-.01	.10	.13	.10
IQ	.12	.10	.03	.15*	.10	.12	.06	.15*
PCL-R	-.21**	-.21**	-.14*	.01	-.29**	-.25***	-.21**	-.27***

\* p < .05    \*\* p < .01    \*\*\* p < .001

### *Dynamic Risk*

Next, we examined correlations between reintegration planning and measures of dynamic risk. Correlations between the VRS: SO pre-treatment Dynamic overall score and reintegration items were generally negative and significant ( $r$ 's from  $-.18$  to  $-.26$ ,  $p$ 's  $< .05$ ), with the only exception being the GLM secondary goods item,  $r = -.06$ . The correlation with the reintegration total score was also negative,  $r = -.31$ ,  $p < .001$ .

Next, we examined the relationships between the VRS: SO pre-treatment Dynamic scale factors – Sexual Deviance, Criminality and Treatment Responsivity – and reintegration scores. Sexual Deviance was negatively correlated with the reintegration protocol items ( $r$ 's ranging from  $-.07$  to  $-.14$ ), with the exception being the GLM secondary goods,  $r = .04$ , but none of these reached significance. Reintegration total score also negatively correlated with Sexual Deviance and approached significance,  $r = -.13$ ,  $p = .06$ . The Criminality factor negatively correlated with all reintegration items, and all but the GLM secondary goods item reached significance. The Criminality factor was also significantly correlated with the total reintegration score,  $r = -.32$ ,  $p < .001$ .

Treatment Responsivity was negatively correlated with all reintegration items except for motivation ( $r = .00$ ). Item correlations reaching significance were those for accommodation ( $r = -.18$ ,  $p < .05$ ) and GLM secondary goods ( $r = -.17$ ,  $p < .05$ ). The latter correlation suggests that offenders who did poorly on the Treatment Responsivity factor were less likely to identify pro-social means of obtaining primary goods. Treatment Responsivity was also negatively correlated with total reintegration scores,  $r = -.15$ ,  $p < .05$ .

Overall Deviance was negatively correlated with items in the reintegration protocol, except the accommodation item. Of these correlations, revised social support ( $r = -.15, p < .05$ ) and the number of support people ( $r = -.20, p < .01$ ) were the only items that reached significance and was due to these items also being significantly correlated with the Sexual Interests factor of the psychometric battery ( $r$ 's =  $-.16$  and  $-.23, p$ 's  $< .05$  and  $.01$  respectively). Overall Deviance was negatively correlated with the reintegration planning total score, but the correlation only approached significance ( $r = -.12, p = .09$ ).

Overall, these results suggest that quality of reintegration planning was generally negatively correlated with dynamic risk measures.

#### *Treatment Outcome*

The SGAS was positively correlated with items in the reintegration protocol. All correlations except for the original social support and number of social support persons were significant, but these two approached significance ( $r$ 's =  $.13$ , and  $p$ 's =  $.07$ ). The correlation between the SGAS and total reintegration score was also significant ( $r = .29, p < .001$ ). The VRS: SO overall change score was positively correlated with all items in the reintegration protocol. Of these correlations, only the correlation with accommodation reached significance,  $r = .15, p < .05$ . The correlation with total reintegration score was also positive,  $r = .11$ , but did not reach significance.

We then looked at how change scores for each VRS: SO Dynamic factor and the VRS: SO motivation score related to the reintegration protocol and total score. Change scores for the Sexual Deviance and Treatment Responsivity factors were positively correlated with the reintegration items. The only correlations to reach significance were

between Treatment Responsivity change scores and accommodation ( $r = .19, p < .01$ ) and motivation ( $r = .20, p < .01$ ). Total reintegration scores were positively correlated with Sexual Deviance change scores, and approached significance ( $r = .14, p = .06$ ), and were positively and significantly correlated with Treatment Responsivity change scores ( $r = .17, p < .05$ ). These show that offenders who showed greater change in these factors did better on all aspects of the protocol. In contrast, Criminality change scores were negatively correlated with most of the reintegration items, with significant correlations with the original ( $r = -.17, p < .05$ ) and revised ( $r = -.19, p < .01$ ) social support items. Approaching significance were the total number of support people ( $r = -.14, p = .05$ ) and total score ( $r = -.14, p = .05$ ). One possible explanation for these negative correlations is that the Criminality change scores were positively correlated with pre-treatment Criminality scores ( $r = .45, p < .001$ ). When pre-treatment Criminality scores were partialled out, the correlation between Criminality change scores and the total reintegration score was  $r = .00$ . Finally, the VRS: SO motivation measure was positively correlated with the reintegration items, with only the correlation with the GLM secondary goods item reaching significance ( $r = .22, p < .01$ ). The correlation between motivation and reintegration total score was also positive and approached significance,  $r = .14, p = .06$ .

Turning to measures of change based on the psychometric battery, the average standardised residual change scores were generally positively correlated with items on the reintegration protocol, with exceptions being the accommodation ( $r = -.11$ ) and motivation ( $r = -.01$ ) items, but no correlations reached significance. The average change score was also positively correlated with total reintegration score, but not significantly,  $r$

= .07. The average clinically significant change scores generally positively correlated with items on the reintegration protocol, again the exceptions being the accommodation ( $r = -.09$ ) and motivation ( $r = -.01$ ) items, but none of the correlations were significant. The average clinically significant change score was positively correlated with reintegration planning total scores,  $r = .10$ , but again did not reach significance.

Overall, these results suggest that treatment gain was positively correlated with the quality of reintegration planning, although with the exception of the SGAS, the relationships were generally weaker than those with pre-treatment dynamic risk scores.

#### *Intelligence and Psychopathy*

IQ scores were positively correlated with the reintegration protocol items, with only the correlation with the GLM secondary goods item reaching significance,  $r = .15$ ,  $p < .05$ . IQ scores were positively correlated with the reintegration planning total score,  $r = .15$ ,  $p < .05$ . These show that with offenders with relatively high IQs were more likely to identify approach goals to help avoid reoffending and had better reintegration plans overall.

Correlations between the PCL-R and items in the reintegration protocol were generally negative, the exception being the GLM secondary goods item ( $r = .01$ ). The correlation with the reintegration planning total score was negative and significant,  $r = -.27$ ,  $p < .001$ . This shows that offenders who scored relatively high in terms of psychopathic personality traits had lower scores in all areas associated with reintegrating back into the community, as well as lower overall reintegration scores.

### *Stepwise Regressions*

Finally, a stepwise regression analysis was conducted to determine which risk factors best-predicted reintegration planning quality. This involved having total reintegration scores as the dependent variables and using the same measures of static and dynamic risk, treatment outcome, intelligence, psychopathy as predictors. Criminality pre-treatment scores and the SGAS combined to be the best predictor of reintegration quality, with a multiple correlation of .38. Criminality negatively correlated with total reintegration scores, and was the most predictive variable of reintegration quality. The SGAS was positively correlated with total reintegration scores, indicating that offenders who performed well in terms of goal attainment during treatment (Hogue, 1994) also had better reintegration plans overall.

### *Summary of Findings*

Correlations between the reintegration protocol and total scores with the Static-99 and VRS: SO Static scale were negative, showing that high risk offenders according to these measures scored poorly in the different areas key to reintegration, and had poorer quality plans overall. Of the two static scales, only the VRS: SO Static scale was significantly correlated with reintegration total score.

Correlations with the VRS: SO pre-treatment Dynamic scale and Overall Deviance were generally negative, showing that again high risk offenders scored poorly in the different areas key to reintegration, and had poorer quality plans overall. The different factors making up the VRS: SO Dynamic scale were mostly negatively

correlated with the reintegration protocol and total score, however, the Criminality factor tended to have a stronger relationship than the other two.

The correlations between measures of treatment outcome and reintegration planning were generally positive, suggesting that positive treatment change was associated with better reintegration scores and better quality plans overall. Analysis of the VRS: SO Dynamic factor change scores showed a differential relationship: Change scores for the Sexual Deviance and Treatment Responsivity factors were positively correlated with the reintegration protocol, whereas Criminality change scores were negatively correlated. However, this result can be attributed to a positive correlation between pre-treatment and change scores on the Criminality factor. Finally, of all the treatment outcome measures, only the SGAS showed a significant relationship with reintegration planning.

Intelligence was positively correlated with the reintegration protocol, with the GLM secondary goods item and total score reaching significance. Offenders with relatively high intelligence were more likely to identify pro-social goals to avoid reoffending and had better quality reintegration plans overall. Psychopathy (as measured by the PCL-R) was negatively correlated with the reintegration protocol and was significant for most items, showing that offenders with more psychopathic personality traits tended to do poorly on the protocol and had poorer reintegration plans overall. It is important to note that PCL-R scores were highly correlated with VRS: SO Criminality factor scores ( $r = .68$ ), suggesting that these may have been measuring a common construct of antisocial personality.

Stepwise regression determined that Criminality pre-treatment scores and the SGAS combined to be the best predictor of reintegration quality. Criminality negatively correlated with total reintegration scores, and was the most predictive variable of reintegration quality, indicating an antisocial personality makes obtaining items relating to reintegration difficult. The SGAS was positively correlated with total reintegration scores, indicating that those who performed well in terms of goal attainment during treatment had better reintegration plans overall.

### *Reintegration Planning and Recidivism*

Next, we assessed the relationship between reintegration planning and recidivism. This was done using three different kinds of analyses. The first was a series of correlational analyses, which examined the relationships between the reintegration protocol, total score, and static and dynamic risk measures, and sexual, violent and general recidivism. Next, the predictive validity of the reintegration measures for recidivism was assessed by calculating AUC values. Finally, we used survival analyses (hierarchical Cox regression) to test the predictive validity of the reintegration planning total score while controlling for measures of static and dynamic risk.

### *Relationships between Reintegration Protocol with Recidivism Outcome*

First, correlational analyses were conducted to examine the relationships of the reintegration planning protocol items, reintegration planning total score, the VRS: SO static and pre-treatment dynamic and total score scales, the Static-99, and Overall Deviance with sexual, violent and general recidivism. Results are presented in Table 6.

Note that correlations between VRS: SO, Static-99 and Overall Deviance and recidivism were previously reported by Beggs and Grace (2010).

Table 6

*Correlations and AUC values with Sexual, Violent and General Recidivism for the Reintegration Protocol and Total Score*

Measures	Correlations			AUC		
	Sexual	Violent	General	Sexual	Violent	General
<b>Reintegration Items</b>						
Accommodation	-.10	-.04	.03	.53	.50	.49
Social Support	-.10	-.09	-.04	.56	.55	.53
Employment	-.10	-.03	-.07	.59	.53	.55
GLM Secondary Goods	-.11	.10	.09	.59	.44	.46
Motivation	-.06	-.12	-.07	.53	.58	.53
Revised Social Support	-.14	-.11	-.04	.60	.57	.53
Social Support N	-.07	-.15*	.02	.60	.63*	.49
Total Score	-.17*	-.07	-.04	.64*	.53	.53
<b>VRS: SO</b>						
Dynamic (Pre)	.37***	.19**	.21**	.77***	.64*	.61**
Static	.22*	.12	.32***	.67**	.60	.69***
Total (Pre)	.35***	.18*	.30***	.77***	.63*	.67***
<b>Other Measures</b>						
Static-99	.31***	.16*	.20**	.70**	.62	.62**
Overall Deviance	.22*	.09	.09	.67**	.57	.55

\* p < .05    \*\* p < .01    \*\*\* p < .001

The reintegration item correlations were generally negatively correlated with all recidivism outcomes, indicating that better quality reintegration plans were associated with a reduced likelihood of recidivism. Exceptions were for violent recidivism, the GLM secondary goods item, and for general recidivism, the GLM secondary goods item

and the number of social support people. Of all the correlations, two reached significance, with total reintegration score significantly related to sexual recidivism ( $r = -.17, p < .05$ ) and the number of social support people significantly related to violent recidivism ( $r = -.15, p < .05$ ). As expected, correlations between the measures of static and dynamic risk were positive, indicating that higher risk scores were associated with increased likelihood of recidivism, with the majority reaching significance. Correlations that were not significant were for violent recidivism, the VRS: SO Static scale and Overall Deviance, and for general recidivism, Overall Deviance.

Next, we examined predictive validity for recidivism in terms of the area under the Receiver Operating Characteristic curve (AUC; Rice & Harris, 1995). Results are also shown in Table 6. Items in the reintegration protocol were not significantly predictive of either sexual or general recidivism, with only the number of social support people significantly predicting violent recidivism. Total reintegration score was predictive of sexual but not violent or general recidivism. Most of the risk measures significantly predicted the different recidivism outcomes. The exceptions were for violent offending, the VRS: SO static scale, the Static-99 and Overall Deviance, although the Static-99 did approach significance ( $AUC = .62, p = .06$ ), and for general recidivism, Overall Deviance. Overall, these results show that better reintegration planning quality was associated with a lower likelihood of sexual recidivism, although the relationships between reintegration item and total scores and recidivism were somewhat weaker than those for traditional measures of dynamic and static risk.

### *Cox Regressions*

Hierarchical Cox regressions were conducted to test whether reintegration planning could provide incremental predictive validity for sexual recidivism after controlling for static and dynamic factors. The static and dynamic measures used in these analyses were the Static-99, Overall Deviance and the VRS: SO pre-treatment Dynamic scale.

The first step involved looking at if reintegration planning predicted sexual recidivism after controlling for each individual risk measure. As expected, the Static-99 significantly predicted recidivism,  $B = .37$  ( $SE = .08$ ),  $\text{Exp}(B) = 1.45$ ,  $p < .001$ . With the Static-99 controlled for, total reintegration score significantly predicted recidivism,  $B = -.18$  ( $SE = .08$ ),  $\text{Exp}(B) = .83$ ,  $p < .05$ , and the incremental validity was significant,  $\chi^2(1) = 4.26$ ,  $p < .05$ . Next, Overall Deviance significantly predicted sexual recidivism,  $B = .31$  ( $SE = .11$ ),  $\text{Exp}(B) = 1.37$ ,  $p < .01$ . With Overall Deviance controlled for, total reintegration scores were also significantly related to recidivism,  $B = -.20$  ( $SE = .09$ ),  $\text{Exp}(B) = .82$ ,  $p < .05$  and added significant incremental validity,  $\chi^2(1) = 4.66$ ,  $p < .05$ . The VRS: SO pre-treatment Dynamic scale significantly predicted sexual recidivism,  $B = .18$  ( $SE = .03$ ),  $\text{Exp}(B) = 1.20$ , and when controlled for, the total reintegration score was not significantly related to recidivism,  $B = -.10$  ( $SE = .09$ ),  $\text{Exp}(B) = .91$ ,  $p = .31$ .

Next, we examined how reintegration planning predicted sexual recidivism when controlling for combinations of each risk measure. With the Static-99 and Overall Deviance controlled for, the total reintegration score was significant,  $B = -.18$  ( $SE = .09$ ),  $\text{Exp}(B) = .84$ ,  $p < .05$ , and the incremental validity approached significance,  $\chi^2(1) = 3.85$ ,  $p = .05$ . With the Static-99 and VRS: SO pre-treatment Dynamic scale controlled for,

total reintegration scores were not predictive of recidivism,  $B = -.11$  ( $SE = .09$ ),  $\text{Exp}(B) = .90$ ,  $p = .25$ , and there was no change in predictive validity,  $\chi^2(1) = 1.27$ , *ns*. Finally, with both the Overall Deviance and VRS: SO pre-treatment Dynamic scale controlled for, total reintegration scores were not predictive of sexual recidivism,  $B = -.10$  ( $SE = .10$ ),  $\text{Exp}(B) = .91$ ,  $p = .32$ , and there was no change in predictive validity,  $\chi^2(1) = .96$ , *ns*. In summary, these results confirm that measures of reintegration planning quality can provide additional predictive validity for sexual recidivism beyond that of some of the current measures used to assess static and dynamic risk.

## **DISCUSSION**

The major goal of the present study was to evaluate the reliability and predictive validity of the reintegration protocol for sexual offenders developed by Willis and Grace (2008, 2009) with a larger, representative sample of offenders who completed a prison-based treatment programme, and to characterise how the quality of reintegration planning varied across the sample. Secondary aims were to compare reintegration planning for intrafamilial and extrafamilial offender subtypes, and to assess how static and dynamic risk factors and treatment outcome were related to reintegration planning. Finally, we planned to test whether reintegration planning accounted for significant variance in predicting sexual recidivism after controlling for measures of static and dynamic risk. To accomplish this, we applied Willis and Grace's protocol to a sample consisting of all offenders who completed the Kia Marama programme and were released between 1993 and 2000.

In assessing the reliability of the reintegration protocol, we found good interrater agreement, with an average Cohen's  $\kappa$  comparable to that reported by Willis and Grace (2008). This shows that the items are clearly operationalised such that raters not involved with the original studies can apply the protocol consistently. We also found that total reintegration scores significantly predicted sexual recidivism, with overall release planning being poorer for recidivists than nonrecidivists. This replicates Willis and Grace's (2008, 2009) findings using a representative sample of child molesters, although it should be noted that the correlation between the reintegration total score and recidivism ( $r = .17$ ) was not as large as that for static risk measures.

The majority of offenders had good quality reintegration plans; overall, the average total score was 61.7% of the maximum possible score. Most had some form of accommodation organised for their release, and a social support network consisting of at least four people. Most offenders had plans regarding possible employment options; however, the majority had made no concrete steps to find a job. Most also had demonstrated motivation to follow through with their release plans. These results reflect the emphasis placed at Kia Marama on reintegration, and the fact that the programme has a designated reintegration coordinator on staff. These results are also informative because they are based on a representative sample of programme completers, unlike the studies conducted by Willis and Grace, who used matched designs in which recidivists were paired with nonrecidivists of the same static risk level.

A comparison of reintegration plans between intrafamilial and extrafamilial offender subtypes found no significant differences in total scores, although differences for the accommodation and number of support persons approached significance, with

extrafamilial offenders scoring more highly than intrafamilial offenders on both of these items. Willis and Grace (2008) suggested that these offender types may have different reintegrative needs not captured by this reintegration protocol, for example that family reconciliation be an important need specific to intrafamilial offenders. The present results suggest that finding accommodation and support may be more difficult for intrafamilial offenders. Intrafamilial offenders also had a lower number of support persons in their network, which may represent the impact of their offending on those closest to them.

We were also interested in the question of how reintegration planning might relate to other important variables for risk assessment, including measures of static and dynamic risk, and treatment outcome. Overall, reintegration planning scores were negatively correlated with both static and dynamic risk: Higher risk offenders tended to have poorer quality reintegration plans. The strongest correlations were obtained for the VRS: SO pre-treatment Dynamic scale. Of the three VRS: SO dynamic factors, both Criminality and Treatment Responsivity were significantly correlated with protocol, with Criminality showing the strongest relationship. Olver et al. (2007) state that the Criminality factor is comprised of items reflecting a general anti-social lifestyle, these being: impulsivity, interpersonal aggression, substance abuse, poor compliance with community supervision, criminal personality, and lack of community support. The present results suggest that offenders with a strong anti-social lifestyle will have more difficulty with developing effective reintegration plans. It is notable that Criminality scores were also negatively correlated with the motivation item, indicating that such offenders may also lack sufficient interest in achieving successful reintegration.

Measures of treatment outcome were generally positively correlated with protocol scores, indicating that offenders who demonstrated more progress in treatment had better plans for reintegration. Of the different measures for treatment outcome, correlations were strongest with the modified SGAS. This shows that offenders who accepted the goals of treatment had better quality reintegration plans. Items included in this modified version included accepting responsibility for offending, and being motivated to change their behaviour. As such, offenders who accepted the goals of treatment may have accepted the importance of having good quality reintegration plans to avoid reoffending.

VRS: SO change scores showed that Sexual Deviance and Treatment Responsivity change scores positively correlated with reintegration planning, but Criminality change scores were negatively correlated. That is, offenders who showed greater change on the Criminality factor had poorer quality reintegration plans. However, we found that this counterintuitive result was likely an artefact of a positive correlation between Criminality change and pre-treatment scores. When pre-treatment Criminality scores were partialled out, the Criminality change scores no longer correlated with reintegration planning. This result is similar to Beggs and Grace's (in press) finding that for many of the items in the psychometric battery, change scores (computed as the difference between post- and pre-treatment scores) were more strongly related with recidivism in the expected direction (i.e., greater prosocial change associated with reduced risk of recidivism) when the pre-treatment scores were partialled out. They showed that this occurred because for scales with minimum values, the pre-treatment score defined the greatest possible change that was achievable. Thus although not directly relevant for the purpose of this study, the present results suggest that VRS: SO

change scores may need to be interpreted cautiously, considering the possibility of a correlation between change and pre-treatment risk level.

We also examined correlations between reintegration planning and intelligence (as measured by the WAIS-R) and psychopathic personality (as measured by the PCL-R). These were of particular interest because Beggs and Grace (2008) found a significant interaction such that the PCL-R more strongly predicted sexual recidivism for relatively low IQ than high IQ offenders. Consistent with expectations, we found that IQ was positively correlated with reintegration planning, while correlations with the PCL-R were negative. The latter were particularly strong ( $r = -.27$ ), similar to results for the VRS: SO Criminality factor.

The similar correlations with the PCL-R and VRS: SO Criminality factor are not surprising, given that these measures were significantly correlated with each other, ( $r = .68$ ), suggesting that they may have been measuring a common construct of antisocial personality. The PCL-R consists of two factors measuring callous/unemotional and antisocial personality traits, so it is not surprising that it would be related to the VRS: SO Criminality factor. PCL-R factor scores were not available for the present sample, however, so we were unable to confirm whether the correlation between PCL-R and Criminality scores was due to Factor 2 (antisocial personality). Overall, these results suggest that sexual offenders who have characteristics of antisocial personality will find it harder to obtain key components of reintegration.

Results from Cox regression analyses, which tested whether reintegration planning accounted for significant variance in predicting recidivism after controlling for measures of static and dynamic risk varied. When controlling for the Static-99, we found

that total reintegration scores predicted sexual recidivism, but with dynamic risk controlled for, results were mixed, with total reintegration scores predictive with Overall Deviance controlled for, but not when the VRS: SO pre-treatment Dynamic scale was controlled for. When the Static-99 and Overall Deviance were controlled, the increment in predictive validity approached significance, but with the Static-99 and the VRS: SO pre-treatment Dynamic scale controlled, the increment in predictive validity was not significant. Finally, when both Overall Deviance and the VRS: SO pre-treatment Dynamic scores were controlled, again the increment was not significant.

These results show that reintegration planning does not contribute incremental validity for risk prediction after dynamic risk, as measured by the VRS: SO, is controlled for. Although this suggests that poor reintegration planning may not be the strongest risk factor, it does not mean that it is an unimportant one. As previously noted, reintegration planning is a focus of the Kia Marama programme, and thus the correlation with recidivism might have been attenuated due to range restriction. It is possible that programmes that do not emphasise reintegration planning might have more variance in terms of reintegration planning outcomes and so may show a much stronger relationship with recidivism.

We also conducted a stepwise regression analysis to summarize the results of the correlations. Our goal was to identify the variables that best predicted reintegration planning, to provide insight into which offenders are most likely to benefit from greater assistance with reintegration planning. This analysis showed that a model consisting of the VRS: SO pre-treatment Criminality factor and SGAS score had a multiple correlation of .38, and no other variables were significantly related to reintegration quality after

controlling for these. These results suggest that offenders with high Criminality scores and who do relatively poorly in treatment are most likely to have inadequate plans for reintegration. Such offenders may require attention from clinicians working with offenders on reintegration, to maximise opportunities available to them so that they may successfully reintegrate back into the community and thereby reduce their likelihood of reoffending.

Deficiencies in the social skills necessary to maintain intimate relationships with adults have been long associated with paedophiles, and are measured on the Social Inadequacy factor in the psychometric battery (Allan et al., 2007), consisting of the following measures; the Social Self-Esteem Inventory (SSEI; Lawson, Marshall, & McGrath, 1979); Assertion Inventory – Response Probability subscale (AI-RP; Gambrill & Richey, 1975); Fear of Intimacy Scale (FIS; Descutner & Thelen, 1991); Revised UCLA Loneliness Scale (UCLS; Russell, Peplau, & Cutrona, 1980); Hostility Towards Women scale (HTW; Check, 1985); Adult Nowicki-Strickland Internal-External Control Scale (ANSIE; Nowicki & Duke, 1983); Beck Depression Inventory (BDI) - versions I (pre-1997 participants; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and II (post-1997; Beck, Steer, & Brown, 1996); and State-Trait Anxiety Inventory (STAI; Spielberger, 1983), which includes subscales for state anxiety and trait anxiety; and the Suppression subscale of the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988). Reflecting the social deficiencies these offenders have, Kia Marama has treatment modules designed to enhance social skills, for example by teaching them appropriate methods of confrontation or self-disclosure. Reintegrating into society is a social process, with gaining accommodation, employment and social support all requiring

appropriate social skills. The above results suggest that antisocial personality is a significant barrier to reintegrating back into society. To assist antisocial offenders to obtain reintegrative needs such as accommodation and social support, then it may be necessary to improve the social skill deficiencies, thereby improving potential for reintegration.

#### *Limitations of the Present Study and Future Research*

Some limitations of the present study should be acknowledged. A number of limitations revolve around the sample used in the current study. First, the sample consisted solely of child molesters and so there is a question of whether conclusions reached in this research can be generalised to other sexual offender types, for example rapists. The sample as a whole was a relatively low risk sample, as assessed by the Static-99, so these results may not generalise to more high risk samples. Finally, all participants in the sample completed a specialist child molester programme, so whether reintegration planning is predictive for offenders who have not completed such a programme is not clear. Future research could attempt to determine whether these findings and those of Willis and Grace (2008, 2009) can generalise to the above samples.

We found that there was little variation in scores on the accommodation item on the reintegration protocol. This is not surprising as Kia Marama policy is to make sure that offenders have accommodation available to them at the time of their release. However, this is a limitation of the present sample, as this item might be more strongly predictive for samples where post-release accommodation is not as strongly emphasised.

To test this possibility, future research could look at samples in which there is more variance in accommodation planning.

Development of the protocol emphasized the needs of sexual offenders against children, but there may be reintegrative needs specific to other types of sexual offenders, for example rapists. As discussed earlier, Willis and Grace (2008) have noted that intrafamilial and extrafamilial offenders may have different reintegrative needs not assessed on this protocol. Future research should examine whether there are different reintegrative needs associated for different types of sexual offenders. Similarly, there may be reintegrative needs specific to offenders from other cultures, for example Māori offenders, which this protocol may not assess. Future research could focus on reintegrative needs that might be specific to certain cultures.

Future research should also study reintegration planning for samples consisting of non-sexual offenders. Although non-sexual offenders will share some of the same reintegrative needs as sexual offenders (for example, accommodation, employment or social support), there may be needs that are specific to other types of offenders. In addition, the results found with the VRS: SO Criminality factor in the present study suggest that non-sexual offenders, who can share antisocial personality traits but not sexual deviance, may experience substantial difficulties in terms of planning for reintegration, similar to sexual offenders who scoring high on the Criminality factor.

This study was retrospective in design and so the question of whether offenders were successful at implementing their release plans was not addressed. A prospective study examining the relationship between reintegration planning and actual experiences may provide stronger evidence of a causal link between poor planning and recidivism.

Such a study was conducted by Willis (2009), using a sample of 16 recently released child molesters. At one and three month post-release intervals, the sample was interviewed about their experiences post release. She found a significant positive correlation between overall release planning and actual experiences at both intervals. These results are encouraging, however further studies could examine this question in greater depth.

Overall, the present study confirms the relationship between reintegration quality and recidivism, as initially shown by Willis and Grace (2008, 2009). The present results show that reintegration added predictive validity for recidivism beyond static risk, replicating Willis and Grace (2008, 2009), and did not add predictive validity beyond that of the VRS: SO pre-treatment Dynamic risk scale. However, this might be due to the emphasis placed on reintegration planning at Kia Marama. We found that the reintegration protocol developed by Willis and Grace is a reliable method for assessing reintegration plans of sexual offenders, finding a comparable Cohen's  $\kappa$  to that of Willis and Grace (2008). Similar to Willis and Grace, we also found intrafamilial and extrafamilial subtypes did not differ in terms of total reintegration scores, but approached significance for the accommodation and number of social support people items, with intrafamilial offenders having difficulty finding accommodation and support people. We also identified a group of offenders who may have particular difficulty formulating reintegration plans, specifically those with antisocial personality traits, as indicated by high scores on the VRS: SO Criminality factor. One possible method of intervening with these offenders may be to address social skill deficits these offenders may have, to help them in obtaining key reintegrative needs.

## REFERENCES

- Abracen, J., Looman, J., Di Fazio, R., Kelly, T., & Stirpe, T. (2006). Patterns of attachment and alcohol abuse in sexual and violent non-sexual offenders. *Journal of Sexual Aggression, 12*, 19-30.
- Albright, S., & Denq, F. (1996). Employer attitudes toward hiring ex-offenders. *Prison Journal, 76*, 118-137.
- Allan, M., Grace, R. C., Rutherford, B., & Hudson, S. M. (2007). Psychometric assessment of dynamic risk factors for child molesters. *Sexual Abuse: A Journal of Research and Treatment, 19*, 347-367.
- Andrews, D. A., & Bonta, J. (2006). *The psychology of criminal conduct* (4th ed.). Cincinnati, OH: Anderson Publishing.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior, 17*, 19-52.
- Bakker, L., Hudson, S. M., Wales, D. S., & Riley, D. (1998). *And there was light... Evaluating the Kia Marama treatment programme for New Zealand sex offenders against children*. New Zealand Department of Corrections Report. Retrieved August 1, 2009, from <http://www.corrections.govt.nz/public/research/therewaslight/index.html>.
- Barbaree, H. E., Seto, M. C., Langton, C. M., & Peacock, E. J. (2001). Evaluating the predictive accuracy of six risk assessment instruments for adult sex offenders. *Criminal Justice and Behavior, 28*, 490-521.

- Barnett, G., & Wood, J. L. (2008). Agency, relatedness, inner peace, and problem solving in sexual offending: How sexual offenders prioritize and operationalize their good lives conceptions. *Sexual Abuse: A Journal of Research and Treatment, 20*, 444-465.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561-571.
- Beggs, S. M., & Grace, R. C. (2008). Psychopathy, intelligence, and recidivism in child molesters: Evidence of an interaction effect. *Criminal Justice and Behavior, 35*, 683-695.
- Beggs, S. M., & Grace, R. C. (2010). Assessment of dynamic risk factors: An independent validation study of the Violence Risk Scale: Sexual Offender Version. *Sexual Abuse: A Journal of Research and Treatment, 22*, 234-251.
- Beggs, S. M., & Grace, R. C. (in press). Treatment gain for sexual offenders predicts reduced recidivism: A comparative validity study. *Journal of Consulting and Clinical Psychology*.
- Bonta, J., Wallace-Capretta, S., & Rooney, J. (2000). A quasi-experimental evaluation of an intensive rehabilitation supervision program. *Criminal Justice and Behavior, 27*, 312-329.
- Check, J. V. P. (1985). *The hostility towards women scale*. Unpublished doctoral dissertation, University of Manitoba, Winnipeg.
- Clark, L. M. (2007). Landlord attitudes toward renting to released offenders. *Federal Probation, 71*, 20-30.

- Craig, L. A., Browne, K. D., Stringer, I. (2003). Treatment and sexual offence recidivism. *Trauma, Violence, & Abuse, 4*, 70-89.
- Craig, L. A., Browne, K. D., Stringer, I., & Beech, A. (2004). Limitations in actuarial risk assessment of sexual offenders: A methodological note. *British Journal of Forensic Practice, 6*, 16-32.
- Craissati, J., & Beech, A. (2003). A review of dynamic variables and their relationship to risk prediction in sex offenders. *Journal of Sexual Aggression, 9*, 41-55.
- Descutner, C. J., & Thelen, M. H. (1991). Development and validation of a Fear-of-Intimacy Scale. *Psychological Assessment, 3*, 218-225.
- Durkin, K. F., & Digianantonio, A. L. (2008). Recidivism among child molesters. *Journal of Offender Rehabilitation, 45*, 249-256.
- Emmons, R. A. (1996). Striving and feeling: Personal goals and subjective well-being. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 313–337). New York, NY: Guilford Press.
- Evans, C., Margison, F., & Barkham, M. (1998). The contribution of reliable and clinically significant change methods to evidence-based mental health. *Evidence-Based Mental Health Notebook, 1*, 70-72.
- Fanslow, J. L., Robinson, E. M., Crengle, S., & Perese, L. (2007). Prevalence of child sexual abuse reported by a cross-sectional sample of New Zealand women. *Child Abuse and Neglect, 31*, 935-945.
- Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse and Neglect, 18*, 409-417.

- Firestone, P., Bradford, J. M., McCoy, M., Greenberg, D. M., Curry, S., & Larose, M. R., (2000). Prediction of recidivism in extrafamilial child molesters based on court-related assessments. *Sexual Abuse: A Journal of Research and Treatment*, *12*, 203-221.
- Gambrill, E. D., & Richey, C. A. (1975). An assertion inventory for use in assessment and research. *Behavior Therapy*, *6*, 550-561.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, *34*, 575-608.
- Glueck, S., & Glueck, E. (1950). *Unraveling Juvenile Delinquency*. New York, NY: Commonwealth Fund.
- Graffam, J., Shinkfield, A., Lavelle, B., & McPherson, W. (2004). Variables affecting successful reintegration as perceived by offenders and professionals. *Journal of Offender Rehabilitation*, *40*, 147-171.
- Grove, W. M., & Meehl, P. E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law*, *2*, 293-323.
- Hammett, T. M., Roberts, C., & Kennedy, S. (2001). Health-related issues in prisoner reentry. *Crime and Delinquency*, *47*, 390-409.
- Hanson, R. K. (1998). What do we know about sex offender risk assessment? *Psychology, Public Policy, and Law*, *4*, 50-72.
- Hanson, R. K., & Bussière, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, *66*, 348-362.

- Hanson, R. K., Gordon, A., Harris, A. J. R., Marques, J. K., Murphey, 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., & Harris, A. J. R. (2000). Where should we intervene?: Dynamic predictors of sexual assault recidivism. *Criminal Justice and Behavior, 27*, 6-35.
- Hanson, R. K., & Harris, A. J. R. (2001). A structured approach to evaluating change among sexual offenders. *Sexual Abuse: A Journal of Research and Treatment, 13*, 105-122.
- Hanson, R. K., Harris, A. J. R., Scott, T., & Helmus, L. (2007). *Assessing the risk of sexual offenders on community supervision: The Dynamic Supervision Project [2007-05]*. Ottawa: Public Safety Canada.
- Hanson, R. K., & Morton-Bourgon, K. E. (2005). The characteristics of persistent sexual offenders: A meta-analysis of recidivism studies. *Journal of Consulting and Clinical Psychology, 73*, 1154-1163.
- Hanson, R. K., & Morton-Bourgon, K. E. (2009). The accuracy of recidivism risk assessments for sexual offenders: A meta-analysis of 118 prediction studies. *Psychological Assessment, 21*, 1-21.
- Hanson, R. K., Steffy, R. A., & Gauthier, R. (1993). Long-term recidivism of child molesters. *Journal of Consulting and Clinical Psychology, 61*, 646-652.
- Hanson, R. K. & Thornton, D. (2000). Improving risk assessments for sex offenders: A comparison of three actuarial scales. *Law and Human Behavior, 24*, 119-136.

- Hare, R. D. (1991). *Manual for the Revised Psychopathy Checklist*. Toronto, Canada: Multi-Health Systems.
- Hare, R. D., Clark, D., Grann, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences & the Law. Special Issue: International Perspectives on Psychopathic Disorders*, 18, 623-645.
- Harris, A., Phenix, A., Hanson, R. K., & Thornton, D. (2003). *STATIC-99 coding rules revised – 2003*. Ottawa: Department of the Solicitor General of Canada.
- Hepburn, J. R., & Griffin, M. L. (2004). The effect of social bonds on successful adjustment to probation: An event history analysis. *Criminal Justice Review*, 29, 46-75.
- Higgins, E. T. (1996). Ideals, oughts and regulatory focus: Affect and motivation from distinct pains and pleasures. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behaviour* (pp. 91-114). New York, NY: Guilford.
- Hirsch, A. E., Dietrich, S. M., Landau, R., Schneider, P. D., Ackelsberg, I., Bernstein-Baker, J., & Hohenstein, J. (2002). *Every door closed: Barriers facing parents with criminal records*. Philadelphia: Center for Law and Social Policy, Community Legal Services, Inc.
- Hogue, T. E. (1994). Goal attainment scaling: A measure of clinical impact and risk assessment. *Issues in Criminological & Legal Psychology*, 21, 96-102.

- Holzer, H.J., Raphael, S., & Stoll, M.A. (2003). *Employer demand for ex-offenders: Recent evidence from Los Angeles*. Retrieved August 1, 2009, from <http://www.urban.org/publications/410779.html>.
- Hudson, S. M., Marshall, W. L., Ward, T., Johnston, P. W., & Jones, R. L. (1995). Kia Marama: A cognitive-behavioural program for incarcerated child molesters. *Behaviour Change*, *12*, 69-80.
- Hudson, S. M., Wales, D. S., Bakker, L., & Ward, T. (2002). Dynamic risk factors: The Kia Marama evaluation. *Sexual Abuse: A Journal of Research and Treatment*, *14*, 101-117.
- Hudson, S. M., Wales, D. S., & Ward, T. (1998). Kia Marama: A treatment program for child molesters in New Zealand. In W. L. Marshall, Y. M. Fernandez, S. M. Hudson & T. E. Ward (Eds.), *Sourcebook of treatment programs for sexual offenders* (pp. 17-28). New York, NY: Plenum Press.
- Kruttschnitt, C., Uggen, C., & Shelton, K. (2000). Predictors of desistance among sex offenders: The interaction of formal and informal social controls. *Justice Quarterly*, *17*, 61-88.
- Langlands, R. L., Ward, T., & Gilchrist, E. (2009). Applying the good lives model to male perpetrators of domestic violence. *Behaviour Change*, *26*, 113-129.
- Laub, J. H., & Sampson, R. J. (2001). Understanding desistance from crime. *Crime and Justice*, *28*, 1-69.
- Laub, J. H., & Sampson, R. J. (2003). *Shared beginnings, divergent lives: Delinquent boys to age 70*. Cambridge, MA: Harvard University Press.

- Laws, D. R. (1989). *Relapse prevention with sex offenders*. New York, NY: Guilford Press.
- Laws, D. R. (2003). The rise and fall of relapse prevention. *Australian Psychologist*, *38*, 22-30.
- Laws, D. R., Hudson, S. M., & Ward, T. (2000). The original model of relapse prevention with sex offenders: Promises unfulfilled. In D. R. Laws, S. M. Hudson & T. Ward (Eds.), *Remaking relapse prevention with sex offenders: A sourcebook* (pp. 3-24). Thousand Oaks, CA: Sage Publications.
- Lawson, J. S., Marshall, W. L., & McGrath, P. (1979). The Social Self-Esteem Inventory. *Educational and Psychological Measurement*, *39*, 803-811.
- Levenson, J. S., & Cotter, L. P. (2005a). The effect of Megan's Law on sex offender reintegration. *Journal of Contemporary Criminal Justice*, *21*, 49-66.
- Levenson, J. S., & Cotter, L. P. (2005b). The impact of sex offender residence restrictions: 1,000 feet from danger or one step from absurd?. *International Journal of Offender Therapy and Comparative Criminology*, *49*, 168-178.
- Levenson, J. S., Macgowan, M. J., Morin, J. W., & Cotter, L. P. (2009). Perceptions of sex offenders about treatment: Satisfaction and engagement in group therapy. *Sexual Abuse: A Journal of Research and Treatment*, *21*, 35-56.
- Lindsay, W. R., Ward, T., Morgan, T., & Wilson, I. (2007). Self-regulation of sex offending, future pathways and the Good Lives Model: Applications and problems. *Journal of Sexual Aggression*, *13*, 37-50.
- Lösel, F., & Schmucker, M. (2005). The effectiveness of treatment for sexual offenders: A comprehensive meta-analysis. *Journal of Experimental Criminology*, *1*, 117-146.

- Lurigio, A. J., Rollins, A., & Fallon, J. (2004). The effects of serious mental illness on offender reentry. *Federal Probation*, 68, 45-52.
- Mann, R. E. (2000). Managing resistance and rebellion in relapse prevention intervention. In D. R. Laws, S. M. Hudson & T. Ward (Eds.), *Remaking relapse prevention with sex offenders: A sourcebook* (pp. 187-200). Thousand Oaks, CA: Sage Publications.
- Mann, R. E., Webster, S. D., Schofield, C., & Marshall, W. L. (2004). Approach versus avoidance goals in relapse prevention with sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 16, 65-75.
- Marlatt, G. A., & Gordon, J. R. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York, NY: Guilford Press.
- Marques, J. K., Wiederanders, M., Day, D. M., Nelson, C., & van Ommeren, A. (2005). Effects of a relapse prevention program on sexual recidivism: Final results from California's sex offender treatment and evaluation program (SOTEP). *Sexual Abuse: A Journal of Research and Treatment*, 17, 79-107.
- Marshall, W. L. (2007). Diagnostic issues, multiple paraphilias, and comorbid disorders in sexual offenders: Their incidence and treatment. *Aggression and Violent Behavior*, 12, 16-35.
- Marshall, W. L., & Marshall, L. E. (2007). The utility of the random controlled trial for evaluating sexual offender treatment: The gold standard or an inappropriate strategy? *Sexual Abuse: A Journal of Research and Treatment*, 19, 175-191.

- Marshall, W. L., Serran, G. A., Fernandez, Y. M., Mulloy, R., Mann, R. E., & Thornton, D. (2003). 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.
- McConaghy, N. (1999). Methodological issues concerning evaluation of treatment for sexual offenders: Randomization, treatment dropouts, untreated controls, and within-treatment studies. *Sexual Abuse: A Journal of Research and Treatment, 11*, 183-193.
- Nowicki, S., & Duke, M. P. (1983). The Nowicki-Strickland Life-Span Locus of Control Scales: Construct validation. In H. M. Lefcourt (Ed.), *Research with the locus of control construct: Vol. 2. Developments and social problems* (pp. 9-49). New York: Academic Press.
- Olver, M. E., Wong, S. C. P., Nicholaichuk, T. P., & Gordon, A. E. (2007). The validity and reliability of the Violence Risk Scale-Sexual Offender Version: Assessing sex offender risk and evaluating therapeutic change. *Psychological Assessment, 19*, 318-329.
- Pereda, N., Guilerab, G., Fornsa, M., & Gómez-Benito, Juana. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect, 33*, 331-342.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47*, 1102-1114.
- Rakis, J. (2005). Improving the employment rates of ex-prisoners under parole. *Federal Probation, 69*, 7-12.

- Reynolds, C. R., Willson, V. L., & Clark, P. L. (1983). A four-test short form of the WAIS-R for clinical screening. *Clinical Neuropsychology*, *5*, 111-116.
- Rice, M. E., & Harris, G. T. (1995). Violent recidivism: Assessing predictive validity. *Journal of Consulting and Clinical Psychology*, *63*, 737-748.
- Rice, M. E., Harris, G. T., & Cormier, C. A. (1992). An evaluation of a maximum security therapeutic community for psychopaths and other mentally disordered offenders. *Law & Human Behavior*, *16*, 399-412.
- Robbers, M. L. P. (2009). Lifers on the outside: Sex offenders and disintegrative shaming. *International Journal of Offender Therapy and Comparative Criminology*, *53*, 5-28.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale. *Journal of Personality and Social Psychology*, *39*, 472-480.
- Sample, L.L. & Bray, T.M. (2006). Are sex offenders different? An examination of rearrest patterns. *Criminal Justice Policy Review*, *17*, 83-102.
- Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.
- Sampson, R. J., & Laub, J. H. (2005). A life-course view of the development of crime. *Annals of the American Academy of Political and Social Science*, *602*, 12-45.
- Schaefer, B. M., Friedlander, M. L., Blustein, D. L., & Maruna, S. (2004). The work lives of child molesters: A phenomenological perspective. *Journal of Counseling Psychology*, *51*, 226-239.

- Seager, J. A., Jellicoe, D., & Dhaliwal, G. K. (2004). Refusers, dropouts, and completers: Measuring sex offender treatment efficacy. *International Journal of Offender Therapy and Comparative Criminology*, 48, 600-612.
- Seleznov, E. (2002). *Time to work: Managing the employment of sex offenders under community supervision*. A project of the Office of Justice Programs, U.S. Department of Justice.
- Seto, M. C., Marques, J. K., Harris, G. T., Chaffin, M., Lalumière, M. L., Miner, M. H.,... Quinsey, V. L. (2008). Good science and progress in sex offender treatment are intertwined: A response to Marshall and Marshall (2007). *Sexual Abuse: A Journal of Research and Treatment*, 20, 247-255.
- Spielberger, C. D. (1983). *State-Trait Anxiety Inventory*. Palo Alto, CA.: Consulting Psychologists Press.
- Spielberger, C. D. (1988). *State-Trait Anger Expression Inventory (STAXI) Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Sullivan, J., & Beech, A. (2002). Professional perpetrators: Sex offenders who use their employment to target and sexually abuse the children with whom they work. *Child Abuse Review*, 11, 153-167.
- Tewksbury, R. (2005). Collateral consequences of sex offender registration. *Journal of Contemporary Criminal Justice*, 21, 67-81.
- Thornton, D., Beech, A., & Marshall, W. L. (2004). Pretreatment self-esteem and posttreatment sexual recidivism. *International Journal of Offender Therapy and Comparative Criminology*, 48, 587-599.

- Tyler, K. A. (2002). Social and emotional outcomes of childhood sexual abuse: A review of recent research. *Aggression and Violent Behavior, 7*, 567-589.
- Wakeling, H. C., Webster, S., Moulden, H. M., & Marshall, W. L. (2007). Decisions to offend in men who sexually abuse their daughters. *Journal of Sexual Aggression, 13*, 81-99.
- Ward, T., & Brown, M. (2004). The good lives model and conceptual issues in offender rehabilitation. *Psychology, Crime, and Law, 10*, 243-257.
- Ward, T., & Gannon, T. A. (2006). Rehabilitation, etiology, and self-regulation: The comprehensive good lives model of treatment for sexual offenders. *Aggression and Violent Behavior, 11*, 77-94.
- Ward, T., & Langlands, R. (2009). Repairing the rupture: Restorative justice and the rehabilitation of offenders. *Aggression and Violent Behavior, 14*, 205-214.
- Ward, T., Mann, R. E., & Gannon, T. A. (2007). The good lives model of offender rehabilitation: Clinical implications. *Aggression and Violent Behavior, 12*, 87-107.
- Ward, T., & Marshall, W. L. (2004). Good lives, aetiology and the rehabilitation of sex offenders: A bridging theory. *Journal of Sexual Aggression. Special Issue: Treatment and Treatability, 10*, 153-169.
- Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk assessment paradigm*. London, UK: Routledge.
- Ward, T. & Stewart, C. A. (2003). The treatment of sex offenders: Risk management and good lives. *Professional Psychology: Research and Practice, 34*, 353-360.
- Wechsler, D. (1999). *The Wechsler Abbreviated Scale of Intelligence*. London, UK: The Psychological Corporation.

- Whitehead, P. R., Ward, T., & Collie, R. M. (2007). Time for a change: Applying the good lives model of rehabilitation to a high-risk violent offender. *International Journal of Offender Therapy and Comparative Criminology*, 51, 578-598.
- Willis, G. M. (2009). *From prison into the community: The impact of release planning on sexual recidivism for child molesters* (Unpublished doctoral dissertation). University of Canterbury, Christchurch, New Zealand.
- Willis, G. M., & Grace, R. C. (2008). The quality of community reintegration planning for child molesters: Effects on sexual recidivism. *Sexual Abuse: A Journal of Research and Treatment*, 20, 218-240.
- Willis, G. M., & Grace, R. C. (2009). Assessment of community reintegration planning for sex offenders: Poor planning predicts recidivism. *Criminal Justice and Behavior*, 36, 494-512.
- Wilson, R. J., Cortoni, F., & McWhinnie A. J. (2009). Circles of Support & Accountability: A Canadian national replication of outcome findings. *Sexual Abuse: A Journal of Research and Treatment*, 21, 412-430.
- Wilson, R. J., Huculak, B., & McWhinnie, A. (2002). Restorative justice innovations in Canada. *Behavioral Sciences and the Law*, 20, 363-380.
- Wilson, R. J., Picheca, J. E., & Prinzo, M. (2005). *Circles of Support & Accountability: An evaluation of the pilot project in South-Central Ontario* (No R-168 2005). Correctional Service of Canada.
- Wong, S. C. P., & Gordon, A. (2006). The validity and reliability of the Violence Risk Scale: A treatment-friendly violence risk assessment tool. *Psychology, Public Policy, and Law*, 12, 279-309.

Zamble, E., & Quinsey, V. L. (1997). *The criminal recidivism process*. New York, NY: Cambridge University Press.

Zevitz, R. G., & Farkas, M. (2000). Sex offender community notification: Managing high risk criminals or exacting further vengeance? *Behavioral Sciences and the Law*, 18, 375-391.