THE ORS AND SRS: UTILITY IN A SEXUAL

OFFENDING TREATMENT CONTEXT AND

RELATIONSHIP WITH RISK AND TREATMENT

OUTCOMES

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Abstract

The impact of sexual abuse has been associated with a multitude of adverse consequences. As newer understandings on effective treatment methods emerge, treatment models are constantly being developed to adhere to best practice methods of reducing risk and recidivism. In clinical settings, Feedback Informed Treatment has been efficacious in reducing negative treatment outcomes. The Outcome Rating Scale (ORS) and Session Rating Scale (SRS) were subsequently developed for timely feedback collection in every treatment session. To investigate the utility of these scales in a sexual offending treatment context implementing the Good Lives Model-Comprehensive (GLM-C), 65 service users of a community-based treatment programme in Christchurch, New Zealand, completed the ORS and SRS in every individual session. As hypothesized, scores on both scales significantly increased over treatment (ORS effect size = .60, SRS effect size = .37). Those who did not complete the programme had lower rates of improved ORS and SRS scores (ORS: $d = .70$, SRS: $d = .71$), and those who were not cooperative with supervision had lower rates of improved ORS scores ($\eta^2 = .22$). The average final ORS score and the average SRS change score had significant negative correlations with post-treatment dynamic risk scores measured on the Stable-2007. These findings suggest treatment for sexual offending implementing the GLM-C significantly improves well-being and therapeutic alliance as measured by the ORS and SRS, and higher well-being and improved therapeutic alliance are linked to favourable treatment outcomes in the form of lower dynamic risk.

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The ORS and the SRS: Utility in a Sexual Offending Treatment Context and Relationship

with Risk and Treatment Outcomes

Sexual offending is a significant problem in New Zealand, with 20 percent of the New Zealand prison population being made up of those convicted of sex offences at any given time (Nadesu, 2011). Furthermore, the New Zealand Crime and Safety Survey (NZCASS) indicates sexual offences are the least likely type of criminal activity to result in apprehension and conviction of the individual, suggesting there are a large proportion of sexual offences not reported in official records (Ministry of Justice, 2014). Internationally, Kanters et al. (2016) noted the prevalence of child sexual abuse also makes up approximately 20 percent of total crime statistics, with only two percent of the male population having been convicted of a sexual crime. In a meta-analysis by Pereda, Guilera, Forns, and Gomèz-Benito (2009), the results indicate the prevalence of sexual abuse is high, with 7.9 percent of men and 19.7 percent of women reporting having been sexually abused before the age of 18. More recently, Walker-Williams and Fouchè (2017), found almost identical results with 18 percent of females and 7.6 percent of males in their study reporting having been sexually abused as a child.

In social contexts, sexual crimes have become a serious public concern, particularly in cases where the victims were children (Mancini, Shields, Mears, & Beaver, 2010; Meloy, Curtis, & Boatwright, 2013; Mogavero & Kennedy, 2017). Stucky and Ottensman (2016) suggested this concern increased in the 1980s after a number of brutal crimes against children became highly publicised, therefore elevating the perceived threat to public safety. To alleviate this public concern, Sex Offender Registries were widely implemented to reduce the perceived risk. In New Zealand, individuals convicted of a sexual offence are placed on the Child Sex Offender Register at the time of sentencing if they are considered a risk to the lives

or sexual safety of one or more children. Information relevant to the identification of the individual is then collected and made available to the public (Child Protection Act 2016, s8). According to Stucky and Ottensman (2016), Sex Offender Registries assume by making the public aware of individuals who have been convicted of a sexual offence, the likelihood of a sexual offence should decrease. However, Comartin, Kernsmith, and Miles (2010) noted these policies are not evidence-based, and only arose from surface validity.

Furthermore, the effectiveness of Sex Offender Registries have been questioned, due to research suggesting either family members or close family friends commit a large proportion of sexual offences (La Fond, 2005). In a literature review, Mogavero and Kennedy (2017) found 95 percent of individuals convicted of sexual offending committed this offence against someone they knew, with 48 percent of these offences being committed against relatives. Only 16 percent sexual offences were committed against strangers. Therefore, Mogavero and Kennedy (2017) highlighted the importance of prevention efforts shifting focus. This shift in focus should highlight educating children not only to avoid strangers, but also to include education on the likelihood of someone in close proximity to the family engaging in a sexual act with a child.

The impact of sexual abuse on victims has been associated with a multitude of adverse consequences (Barrera, Calderón, & Bell, 2013; Browne & Finkelhor, 1986; Davis & Petretic-Jackson, 2000; Wolfe, Gentile, & Wolfe, 1989), and Kendall-Tackett, Williams, and Finkelhor (1993) argued no psychological disorder exists that has not been linked to past sexual abuse. More recently, Aydin, Akbas, Turla, and Dunar (2016) found that being the victim of sexual abuse as a child is one of the biggest predictors of childhood, adolescent, and adult psychopathology. According to Aydin et al. (2016), victims of child sexual abuse have a high likelihood of developing post-traumatic stress disorder (PTSD) and depressive disorder. Furthermore, according to Dyer et al. (2013), childhood sexual abuse is also a

significant predictor of distorted body image and co-morbid eating disorders. In their cross-sectional study, 84 female participants diagnosed with PTSD after childhood sexual abuse were tested psychometrically, and Dyer et al. (2013) found participants were more likely to report negative perceptions toward their physical appearance and sexuality, and were more likely to report symptoms of eating disorders and low levels of self-confidence than their counterparts who had not been a victim of sexual abuse.

Maikovich-Fong and Jaffee (2010) noted that studies investigating the impact of sexual abuse on victims have often only included female participants, and male sexual abuse victims are grossly underrepresented in the literature. In their cross-sectional study comparing sex differences in outcomes from child sexual abuse, there were no sex differences found in terms of psychological impact, as both males and females had a high risk of developing some form of psychological disorder. However, males were less likely to report the abuse than females, and Maikovich-Fong and Jaffee (2010) suggested this may be due to fear of being identified as gay if abused by another male, or that it will not be considered sexual abuse if abused by a female perpetrator. Furthermore, Du Mont, Macdonald, White, and Turner (2013) suggested male victims of sexual abuse are likely to experience both internalising and externalising problems such as self-mutilation, aggression, suicide ideation, and other risky behaviours. Du Mont et al. (2013) also found in their study only 58 percent of male victims have sought psychological help. These findings on the impact of sexual abuse highlight the importance of treatment interventions with those who have engaged in harmful sexual behaviour to minimise future harm. Therefore, the following review of the literature will discuss the etiology of sexual offending and the development of current treatment models and risk measurement tools. The development of Feedback Informed Treatment (FIT) will then be reviewed, as well as the benefits of implementing FIT across treatment settings. The

current research will then further advance the literature on FIT, by exploring the use of it in

sexual offending treatment and the implications underlying the findings.

1.1. Theories of Sexual Offending

Several theoretical models have been produced in order to gain understanding, provide

treatment targets, and create prevention strategies in response to sexual abuse. Although an

exhaustive description of every theory of sexual offending is beyond the scope of the current

project, the ones that have been a central focus in the literature will be discussed.

1.1.1. Finkelhor's Precondition Model.

According to Howells (1995), Finkelhor's widely-cited Precondition Model provides a

framework that addresses the situational factors of child abuse that can be applied to both

familial and non-familial contexts. Finkelhor's Precondition Model proposes four

preconditions must be met before sexual offending can occur, which include i) the motivation

to sexually abuse, ii) the ability to overcome internal inhibitors, iii) the ability to overcome

external inhibitors, and iv) the ability to overcome the resistance of the child (Finkelhor,

1986). In the first precondition, Finkelhor's Precondition Model suggests those convicted of a

sexual offence most often have a sexual preference for children, and in some cases they

report a strong emotional connection with the child. However, subsequent empirical research

has found not all individuals engaging in harmful sexual behaviour meet the criteria for

paedophilia, and although the precise data is unclear, those with a sexual preference for

children only make up a certain proportion of sexual offences (Levine & Dandamudi, 2016).

Nevertheless, Finkelhor's Precondition Model suggests the strong emotional connection with

the child occurs when the child satisfies an emotional non-sexual need for the individual such

as companionship and acceptance. Therefore, this model suggests without the non-sexual

need satisfaction or the preference for engaging in sexual acts with children, the first

precondition is not met, and the act of child sexual abuse will not occur.

According to Finkelhor (1986), the second precondition suggests an individual will not progress to commit a sexual offence if internal inhibitions most often present due to social inculcation are not overcome. Common disinhibitors include alcohol, psychosis, issues around impulse control, failure of the incest inhibition mechanism, and senility. Therefore, if an individual has the motivation to sexually abuse and their internal inhibitions are not overcome, the individual will not progress to commit a sexual offence. The third precondition in Finkelor's Precondition Model suggests external inhibitors also need to be overcome for a sexual offence to occur. These are variables in the environment that will prevent an individual committing a sexual offence, and often include a protective parent/caregiver and an environment where the child is rarely alone. Therefore, the individual can overcome these boundaries by creating a trusting relationship with the child and family to gain access to the child without the protection of other family members or friends. Finally, according to Finkelhor (1986), the fourth precondition involves overcoming resistance of the child. Therefore, the individual needs to have a trusting relationship with the child in order for the child to comply, or they may need to resort to aggression to overcome resistance. This often occurs through the use of threats or physical force, and Howells (1995) found in a review of the literature that 33% of victims have received threats of harm, 23% have been physically restrained, and seven percent have been physically harmed for the perpetrator to overcome resistance. However, Finkelhor's Precondition Model does not exhaust all possible preconditions to offending, and it does not consider other factors such as developmental experiences or personality factors.

1.1.2. Marshall and Barbaree's Integrated Theory.

Marshall and Barbaree (1990) subsequently published their Integrated Theory, which places emphasis on the need for males in adolescence to learn how to discriminate between

aggression and sexual impulses. Marshall and Barbaree's Integrated Theory has a central focus on biological processes, and suggests when an individual begins experiencing sexual impulses at the beginning of adolescence, they are to develop control and inhibit these urges. If these impulses are not controlled or inhibited, a sexual offence may occur (Marshall & Barbaree, 1990). Emphasis is placed on early developmental experiences such as relationship bond between the child and caregiver, and abusive and neglectful living environments. Therefore, the Integrated Theory suggests an individual without a secure relationship with their parent/caregiver may not develop the skills required in adolescence to inhibit these sexual impulses. Marshall and Barbaree (1990) suggested poor attachment might not lead the individual to form trusting relationships with others, and this may cause the individual to develop hostile attitudes supportive of offending. Furthermore, the individual without a secure parent/caregiver relationship may not fully develop a sense of personal security and power, which can impact negatively on their self-efficacy. Therefore, their perception of personal autonomy may be weakened, leading to the decreased ability to exert control over their behaviour. This lack of control can then progress into sexually harmful behaviour. Furthermore, Marshall and Barbaree (1990) suggested the type of relationships the individual experiences in childhood can lead them to believe that significant people in their lives are emotionally unavailable for them. These experiences can develop into to an inability to form social and intimate relationships where healthy sexual relationships can arise. Therefore, the lack of reciprocation may lead sexual urges experienced by the individual to be forced upon others.

Drawing on Social Learning Theory (Bandura & Walters, 1977), Marshall and Barbaree (1990) suggested an abusive and neglectful environment modelled to the individual during childhood can lead to learned aggressive behaviour. Therefore, the aggressive behaviour learnt through modelling may be applied to others through the route of sexual offending.

Marshall and Barbaree (1990) also suggested that abusive or neglectful developmental experiences might not provide the necessary socialisation skills needed in order to learn how to control and discriminate sexual urges and aggressive behaviour.

1.1.3. Hall and Hirschman's Quadripartite Model.

Hall and Hirschman's Quadripartite Model builds on the two previous theories by including circumstantial state factors such as inappropriate expression of physiological arousal, cognitive appraisals, and affective dyscontrol. This model also includes the enduring trait variable of problematic personality factors (Hall & Hirschman, 1991). The Quadripartite Model suggests while physiological sexual arousal plays a large role in sexual behaviour, it is when this arousal is expressed inappropriately that sexual behaviour can become harmful. However, Hall and Hirschman (1991) suggested the presence of physiological arousal alone is insufficient to explain sexually abusive behaviour, and it is the interaction of sexual arousal and subsequent cognitive appraisals that can lead to sexual aggression. These cognitive appraisals may be contradictory to the environment and often justify harmful behaviour, such as the belief that an individual's sexual advance was reciprocated or that the sexually harmful behaviour was enjoyable. According to Hall and Hirschman (1991), cognitive appraisals may also lead the individual to believe that the victim deserved it, and this belief can be attributed to a negative perception toward women. Furthermore, males engaging in sexually aggressive behaviour often view their relationships with women as hostile, and Hall and Hirschman (1991) suggested this perception could also lead to sexual abuse.

Regarding affective dyscontrol, Hall and Hirschman (1991) suggested negative affective states often precede the cognitive appraisals that lead to sexually harmful behaviour. These affective states can include feelings of anxiety, depression, anger, and hostility. Usually, it is the depressive affective states that lead to sexual offending against children, and angry and hostile states that lead to sexual offending against adults. However, this model emphasises

that it is not unusual for individuals to experience negative affective states, but sexually

harmful behaviour can occur when these affective states overpower inhibitions previously

preventing sexual aggression such as guilt, empathy, and moral conviction. Hall and

Hirschman (1991) also suggested the enduring trait variable of problematic personality

factors can lead an individual to commit a sexual offence, such as selfishness and a lack of

empathy or remorse. These traits may arise from a developmentally-related personality

problem or a personality disorder, and can also lead to emotional difficulties, poor social

skills, poor adult adjustment, and chronic substance abuse. Regarding developmental

experiences, the individual may have also experienced family conflicts or childhood physical

and sexual abuse. Much like Marshall and Barbaree's Integrated theory, Hall and Hirschman

(1991) suggested sexual offending can occur because the individual did not experience

positive socialisation in childhood, and therefore appropriate skills that need to be learned in

order to inhibit behaviour do not fully develop.

1.1.4. **Ward and Siegert's Pathways Model.**

Ward and Siegert's Pathways Model combines psychological, biological, cultural, and

situational factors, and proposes that there are five etiological pathways that can lead an

individual to commit a sexual offence (Ward & Siegert, 2002). These pathways include

intimacy deficits, deviant sexual scripts, emotional dysregulation, cognitive distortions, or

multiple dysfunctional mechanisms. According to Ward and Siegert (2002), individuals

adhering to the etiological pathway of intimacy deficits engage in sexually harmful behaviour

against children when a preferred adult partner is unavailable. The intimacy deficits leading

to an inappropriate choice in a sexual partner can arise from insecure attachment styles.

These insecure attachment styles lead to fear of rejection and apprehension about whether

their partner will reciprocate intimacy. The individual may then distance themselves from

others due to this fear of rejection, which then impairs the individual's ability to form

intimate relationships. Therefore, the resulting emotional loneliness may lead to the attempt to create an adult-like relationship with the child.

The second etiological pathway contains individuals with deviant sexual scripts, and Ward and Siegert (2002) suggested a proportion individuals in this pathway also have issues resulting from their attachment style. However, individuals in this pathway do not prefer children as sexual partners, as their harmful behaviour arises from the confusion of sexual cues. Ward and Siegert (2002) suggested these individuals have difficulty differentiating intimacy and closeness with sex, and therefore confuse acts of affection as a sign of a sexual advance. Individuals in this pathway may also engage in harmful sexual behaviour with children following periods of perceived rejection from adults, and therefore the child may fulfil an emotional and/or sexual need. It is common for these individuals to have been the victim of sexual abuse as a child, therefore the individual may become prematurely sexualised, which means their ability to engage in healthy sexual relationships is compromised (Ward & Siegert, 2002).

The third etiological pathway outlined by Ward and Siegert (2002) is the emotional dysregulation pathway. Ward and Siegert (2002) suggested this pathway contains individuals who may have normal sexual scripts but have difficulty either identifying emotions, an inability to regulate negative emotions, an inability to seek social support in stressful circumstances, or an inability to control their anger. Therefore, individuals following this pathway may use sex as a self-soothing strategy when they experience negative emotions, and in normal circumstances they usually prefer sex with consenting age appropriate partners. It is when they are experiencing negative emotions that they are more likely to commit a sexual offence against a child.

The fourth pathway in this model includes individuals who experience antisocial cognitions and pro-criminal attitudes in general. Ward and Siegert (2002) suggested these

individuals often possess patriarchal attitudes toward children and are likely to exhibit a sense of their own superiority. They also do not have issues around negative affective states and low self-esteem, as they are unlikely to feel remorseful about their sexually abusive behaviour. The individuals in this pathway are more similar to those with convictions of general offending than the individuals described in the other pathways, and their sexual offending may only reflect a certain percentage of their antisocial behaviour.

The fifth etiological pathway proposed by Ward and Siegert (2002) is the pathway of multiple dysfunctional mechanisms. Individuals in this pathway have numerous problematic areas linked to their sexual offending. This pathway contains individuals with distorted sexual scripts, and will view children as their preferred sexual partner. They will also experience cognitive distortions regarding children's sexuality and their ability to make informed decisions. Those with multiple dysfunctional mechanisms will also have an inability to regulate negative emotions. Ward and Siegert (2002) suggested a number of individuals in this pathway can be described as paedophiles, due to the belief that their attraction and sexual interests in children are healthy and reciprocated. It is important to note, however, that the Pathways model emphasises while individuals are likely to adhere to one of these dominant pathways, no sexual offence occurs without the presence of all symptom clusters found in every pathway (Ward & Siegert, 2002).

1.1.5. The Integrated Theory of Sexual Offending: An Etiological Theory.

Ward and Beech (2005) introduced a framework to explain the onset, development, and maintenance of sexual offending in a way that unifies the prominent theories of sexual offending previously outlined. The Integrated Theory of Sexual Offending (ITSO) suggests sexual offending occurs due to the interaction of causal variables, which include biological, ecological niche, and neuropsychological factors. The biological factors include genes, hormones, and attachment, the ecological niche factors include social, cultural, and

environmental circumstances, and the neuropsychological factors include motivation/emotion, perception and memory, and action selection and control (Ward and Beech, 2005). According to Ward and Gannon (2006), it is the interaction of the biological, ecological niche, and psychological factors that lead to the development of clinical problems linked to sexually harmful behaviour. These can include emotional problems, deviant sexual arousal, and social difficulties. Ward and Beech (2005) refer to these as state factors, and it is the presence of these factors in an individual that lead to sexually deviant actions. Furthermore, the ITSO suggests sexually harmful behaviour emerges from the interaction of both primal and distal factors. More specifically, if an individual experiences psychological vulnerabilities, they are less likely to function appropriately in aversive environmental circumstances, which may make them more likely to commit a sexual offence at a later time (distal factor). Furthermore, when an individual is in an environment that triggers their sexually harmful behaviour such as the presence of a potential victim, this is referred to as a proximal factor as it is present at that point in time (Ward & Beech, 2005).

The ITSO also emphasises the role that both brain development and social learning play on psychological functioning, with biological inheritance and learned experiences impacting on the motivation/emotion, perception and memory, and action selection and control systems. According to Ward and Gannon (2006), the motivation and emotion system function by allowing goals and values to adjust an individual's motivational state in a particular environment. Furthermore, the perception and memory system function by processing sensory information, which allows the individual to construct representations of a situation. Finally, the action selection and control mechanisms function by allowing the individual to implement actions while controlling thoughts and behaviour. Deficits in these areas may lead an individual to engage in sexually harmful behaviour (Ward and Gannon, 2006). The ITSO also provides an explanation for the maintenance of sexual offending, which is described a

continuous feedback loop resulting from the reinforcement experienced from a sexually abusive act. For example, an individual engaging in sexually abusive behaviour may be experiencing a negative mood state. Therefore, Ward and Beech (2005) suggested sexually abusive behaviour can be maintained and strengthened if this negative mood state is removed when the individual commits an offence. This negatively reinforces the individual, therefore making the behaviour more likely to occur on subsequent occasions this negative mood state is experienced.

According to Ward and Beech (2005), the construction of the ITSO took into account previous major theories of sexual offending. The four preconditions in Finkelhor's Precondition Model (Finkhelor, 1986) can be integrated into the three psychological systems described by the ITSO, with the first precondition of being motivated to sexually abuse a child being part of the motivation/emotion system, the second precondition of overcoming internal inhibitors being part of action selection and control system, and the third and fourth preconditions of overcoming external inhibitors and child resistance being part of the memory and perception system (Ward & Beech, 2005). The ITSO can be linked to Marshall and Barbaree's (1990) Integrated Theory because the major components in this model can also be incorporated into the three neuropsychological systems outlined by the ITSO. The issues around attachment, intimacy, and emotional needs can integrate into the motivation/emotion system, the issues around impulsivity, social skills, and self-regulation can integrate into action selection and control, and issues around beliefs, strategies, and values can integrate into perception and memory. Furthermore, Marshall and Barbaree's Integrated Theory focuses on early learning events, which can be explained by the ecological niche component of the ITSO.

According to Ward and Beech (2005), the ITSO also took into account Hall and Hirschmann's (1991) Quadripartite Model. The major constructs of the Quadripartite Model

can be referred to as both state factors as outlined by the ITSO, as well as trait factors

comprising the three neuropsychological systems. The sexual arousal component can be

integrated into the motivation/emotion system, the cognitive distortions can be integrated into

both the motivation/emotion and perception/memory systems, the affective dyscontrol

component can be integrated into both motivation/emotion and action selection and control

systems, and personality problems can be integrated into all three systems (Ward & Beech,

2005). Lastly, the ITSO also took into account Ward and Siegert's (2002) Pathways Model.

Ward and Beech (2005) suggested the intimacy and social skill deficit pathway could be

distributed across more than one neuropsychological system, with the goal of intimacy being

integrated into the motivation/emotion system, and interpersonal strategies being integrated

into the action selection and control system. The distorted sexual scripts pathway could be

distributed across the three systems, with the affective component of these scripts being

integrated into the motivation/emotion system, and control of emotions and behaviour being

located in the action selection and control system. The perceived relevance of sexual

behaviour can then be integrated in the perception and memory system. Ward and Beech

(2005) suggested the emotion dysregulation pathway can be integrated into the action and

selection system in regards to goals, and the motivation/emotion system in regards to affect.

The fourth pathway of cognitive distortions can also be distributed across the three systems,

with beliefs being located in the perception and memory system, and rationalisations being

located in the action selection and control system and motivation/emotion system.

1.2. Treatment for Sexual Offending

    With the etiology of sexual offending highlighting the heterogeneity of those convicted of

a sexual offence (Blasko, 2016), treatment in a sexual offending context is an ever-evolving

practice supported by extensive empirical research. Despite a report on the effectiveness of

rehabilitation suggesting that nothing works (Martinson, 1974), several treatment models

have been developed to provide intervention for the diverse range of those who have engaged in harmful sexual behaviour (Stinson, Becker, & McVay, 2017). As newer understandings of the etiology and factors empirically linked to sexual offending have emerged, treatment targets are constantly being modified in order to provide the best scope of managing risk and reducing recidivism (Stinson et al., 2017). Kingston, Yates, and Olver (2014) noted intervention for those who have committed a sexual offence is typically approached by targeting intermediate factors empirically linked to sexually aggressive behaviour and include affective, behavioural, cognitive, and contextual factors. Interventions to target these factors have therefore been developed into treatment models such as Cognitive Behavioural Therapy (CBT) and Relapse Prevention (RP). However, the Good Lives Model (GLM) has recently emerged with a shift in focus from risk management and alleviating deficits to a more strengths-based approach (Ward & Stewart, 2003).

1.2.1. Risk, Need, and Responsivity.

According to Andrews and Bonta (2017), for treatment to be effective for any type of offending, adherence to the Risk, Need, and Responsivity (RNR) model is required. The RNR model is strongly based on the psychology of human behaviour and draws on empirically supported general personality and cognitive social learning perspectives. It emphasises the importance of introducing human service into the justice context while not only relying on deterrence and restoration to reduce recidivism. It also applies current empirical understandings to both the prediction of criminal behaviour and the ability to influence the prevention of criminal activity. According to Andrews and Bonta (2017), the RNR model has three general principles of effective correctional treatment.

The Risk principle of the RNR model suggests criminal behaviour can be predicted, and individuals should have their level of risk assessed to match them to treatment suitable for their risk level. Andrews and Bonta (2017) noted it is important to assign the individual to

appropriate treatment based on their risk level, because assigning mismatched levels of treatment intensity may actually increase recidivism rates.

Andrews and Bonta (2017) outlined eight central risk factors as being highly correlated and empirically linked to recidivism, and the presence and extent of these factors in part determine risk level. These include antisocial personality pattern, antisocial cognitions, antisocial history, antisocial associates, substance abuse, work/school, recreational activities, and family/relationships. Risk factors associated with reoffending are considered either static or dynamic. Static risk factors consist of factors that are unable to be changed, such as an antisocial history and age at first offence. Dynamic risk factors consist of factors that are related to offending that are able to be changed and are often targeted in treatment, such as antisocial cognitions, antisocial associates, and antisocial personality pattern.

Andrews and Bonta (2017) also suggested in order to provide effective treatment, it is essential to target criminogenic needs, which are the dynamic risk factors that have been empirically associated with re-offending (the Needs principle). When these needs change, they are associated with changes in the probability of recidivism. Andrews and Bonta (2017) argued that treatment services with the intention of reducing recidivism should target these needs, however, factors not directly associated with reductions in recidivism (non-criminogenic needs) may also be a desirable target in treatment. Addressing non-criminogenic needs such as motivation may make an individual more accepting toward and able to complete treatment, and therefore, addressing non-criminogenic needs in some cases may indirectly impact on criminogenic needs.

The final of the major three principles in the model is the Responsivity principle, and consists of both general and specific responsivity. According to Andrews and Bonta (2017), adhering to the general responsivity principle requires delivering treatment in a way that suits the individual's particular needs and learning style in a warm and respectful manner. It

suggests the most powerful treatment interventions include cognitive-behavioural and cognitive social learning strategies, such as modelling, reinforcement, cognitive restructuring, and role-playing. For example, treatment adhering to this principle should involve reinforcement for the individual when they exhibit pro-social behaviour, and any display of antisocial behaviour or attitudes should be responded to with disapproval followed by modelling of pro-social alternatives. Andrews and Bonta (2017) argued that treatment should also adhere to the specific responsivity principle, which requires acknowledging individual characteristics such as intellectual ability, anxiety, and cognitive maturity. For example, if an individual receiving treatment is intellectually impaired and placed in a treatment programme that does not address this, the responsivity principle suggests the treatment will likely be ineffective.

1.2.2. Cognitive Behavioural Therapy.

According to Kim, Benekos, and Merlo (2016), two of the most common treatment programmes for those who have engaged in sexually abusive behaviour in recent decades have been Cognitive Behavioural Therapy (CBT) and Relapse Prevention (RP).

CBT incorporates both a cognitive and behavioural focus within treatment. The cognitive component addresses thoughts, beliefs, and attitudes by targeting dysfunctional and potentially deviant thinking to reduce undesirable or distressing behaviour. The behavioural aspect of CBT targets behaviour patterns and settings that lead to undesirable behaviour by teaching the individual new skills and helping them develop confidence in maintaining pro-social behaviour (Kim et al., 2016). Jennings and Deming (2013) noted the behavioural aspect of CBT was the main form of treatment for sexual offending in the 1960s and continued to be up until the beginning of the 1970s. A large part of behavioural therapy during this period involved aspects of classical conditioning to redirect sexual interests to age appropriate and consensual stimuli. This treatment would encourage the individual to

fantasise about sexually appropriate themes while masturbating to the point of orgasm. Once this is accomplished, the individual would then be asked to continue the masturbation after climaxing while thinking about a sexually deviant fantasy. Through classical conditioning, this should pair deviant sexual thinking with boredom and discomfort, therefore reducing sexual arousal when a deviant sexual fantasy emerges (Gray, 1995). Furthermore, by encouraging the individual to masturbate to age appropriate and consensual sexual stimuli, this should pair sexual arousal with healthy sexual themes. This should, in turn, recondition the individual so they are no longer aroused by deviant fantasies (Hudson & Ward, 1998).

According to Jennings and Deming (2013), behavioural treatment for sexual offending broadened to include cognitive therapy in the 1970s. When cognitive therapy emerged, treatment became more comprehensive and no longer had the limited focus on targeting deviant sexual interest. Treatment incorporating cognitive therapy targets maladaptive beliefs and attitudes around sex in individuals at risk of sexually offending (Schaffer, Jeglic, Moster, & Wnuk, 2010). These are referred to as cognitive distortions and schemas. Schaffter et al. (2010) described cognitive distortions as inaccurate thought processes supportive of sexual offending, and schemas as beliefs that support these deviant thought processes. Schemas theoretically and/or empirically linked to sexual offending include an entitlement to sex, the notion that children are sexual beings and enjoy sex, and that sexual activity does not harm children. Therefore, therapy targeting these cognitions and schemas has been a central focus in sexual offending treatment, with techniques including the collection of daily thought records in order to identify thought distortions, learning how to label maladaptive thoughts, and learning how to generate more pro-social adaptive thoughts to replace anti-social thinking (Schaffer et al., 2010). In a meta-analysis by Hanson et al. (2002), it was found that treatment programmes utilising CBT were effective in reducing recidivism amongst those who had committed a sexual offence. The results showed an average recidivism rate of 9.9%

amongst individuals who completed CBT, and an average recidivism rate of 17.4% amongst

the comparison who received older forms of treatment that did not meet appropriate standards

of practice.

1.2.3. Relapse Prevention.

Another frequently used treatment framework utilised with those who have committed a

sexual offence is Marlatt's Relapse Prevention (RP) model (Ward, 2000). RP was originally

developed in the 1980s as a tertiary prevention method in the field of addictions, and aims to

prevent relapse and maintain abstinence using a cognitive-behavioural framework that

enhances self-control (Marlatt & Dovovan, 2005). Subsequently, Pithers adapted RP as a

treatment framework for those with a history of sexual offending, and has since been used in

90% of sexual offending treatment programmes in North America (Pithers & Gray, 1996).

According to Gordon and Hover (1998), RP acknowledges that sexual offences occur in a

series of steps caused by problematic behaviour, and once this behaviour is identified, the RP

model suggests it can be targeted and modified. Furthermore, the goal of RP is to work with

individuals to help them acknowledge the chain of events that lead to offending, while

helping them develop and practice cognitive and behavioural techniques that can prevent the

chain of events from reoccurring (Luanay, 2001). The individual is taught coping strategies

and alternative behaviours to use when they find themselves in the offence chain, and these

behaviours are practiced repeatedly through role-play with the therapist. Luanay (2001)

placed emphasis on the importance of trying to break the chain in the early stages, as it gets

increasingly difficult to prevent the offence as their problematic behaviour progresses. This is

because high levels of sexual arousal can overpower an individual's inhibitions, and this can

lead to an impulsive action. Therefore Luanay (2001) suggested it is easier to prevent

behaviour from occurring before the individual gets into this state.

Furthermore, Brunswig and O'Donohue (2002) noted that a large part of treatment in the

RP framework requires the individual to accept responsibility for their offence. It is common for individuals to attempt to deny their offence or minimise the impact their actions would have had on the victim, and the RP model suggests that the individual will not be motivated for treatment if they do not accept full responsibility for their actions and consequences. In the cases where the individual does not accept responsibility, Brunswig and O'Donohue (2002) suggested Motivational Interviewing (MI) developed in part by Miller and Rollnick (1991) is an appropriate method to help the individual come to terms with their actions. MI is a conversation style that guides an individual to be motivated for change in a manner that is collaborative and non-confrontational (Miller & Rollnick, 2012). If this method has been implemented and the individual still will not accept responsibility, the RP framework requires them to withdraw from treatment until they are willing to own up to their offence. RP also involves educating the individual on what constitutes a sexual offence. This is due to the possibility of the individual not being aware that their actions may be considered sexual abuse, and therefore the idea is that the awareness will prevent them from engaging in that behaviour in the future. Other aspects of treatment in the RP framework involve enhancing social skills and building self-esteem, with the notion that targeting these areas will improve relationship deficits and issues with low self-esteem and self-efficacy that may have led to offending (Brunswig & O'Donohue, 2002).

Several issues have been identified in the application of RP to people with a history of sexual offending (Hudson & Ward, 1996; Ward, 2000). According to Witkiewitz (2011), the application of RP to those with a history of sexual offending does not address the multiple motivations this population has, and the requirement of the individual accepting responsibility for the offence does not take into consideration that they may not be willing to change. The RP framework suggests that one of the main pathways to sexual offending is the experience of a negative affective state within the individual, whereas Ward (2000) suggested

one third of individuals committing sexual abuse do so while experiencing a positive affective state, potentially caused by cognitive distortions. These individuals end up in the offence cycle to seek immediate sexual gratification, and may view child-adult sexual contact as beneficial (Ward, 2000). Furthermore, according to Hudson and Ward (1996), the application of the RP model to sexual offending suggests that a sexual offence occurs through covert planning, whereas Witkiewitz (2011) suggests that in many cases a sexual offence is explicitly and extensively planned. Marshall (2011) raised another issue with RP by noting that individuals who have engaged in harmful sexual behaviour often genuinely do not remember every event that lead up to their offending, as some individuals have reported after completing treatment that they identified an offence chain in order to adhere to the requirements of therapy, and that they believed they were not overly accurate.

1.2.4. Good Lives Model.

Due to the major approach of treatment for sexual offending focusing on risk management, Ward and Stewart (2003) outlined a newer model that enhances capabilities in the individual in order to focus on improving quality of life and individual well-being. Introduced as the Good Lives Model (GLM), this strengths-based approach suggests that a large part of treatment should involve equipping the individual with necessary skills to secure primary human goods using socially acceptable methods. Ward and Stewart (2003) define primary goods as actions, experiences, characteristics, and states of mind that are sought for individual benefit. Furthermore, Ward (2002) suggested human well-being requires three necessary conditions to be met, which include satisfying physiological needs, establishing psychological capabilities for optimal functioning, and a social environment that serves as a facilitator of achieving primary goods. Therefore, Ward and Stewart (2003) defined nine areas that all humans (offenders or otherwise) naturally strive to achieve including optimal mental, physical, and sexual health, knowledge, mastery in work and play, autonomy, inner

peace, relatedness, creativity, spirituality, and happiness. These primary goods are intrinsically beneficial to human beings, and the weight and preference given to each area depends on individual experiences, values, and priorities. Therefore, Ward and Stewart (2003) suggested sexual offending could transpire due to problematic behaviour that an individual exhibits while trying to pursue these goods. Treatment using principles outlined in the GLM should then identify the goods the individual aims to acquire and equip them with the necessary skills to obtain them pro-socially. Ward and Stewart (2003) referred to the concrete means of achieving the primary goods as secondary goods, which take the form of actions and behaviours to pursue goals important to the individual. Therefore, the GLM emphasises that treatment should be tailored to suit the individual and the environment likely to be encountered upon release. According to Willis, Yates, Gannon, and Ward (2013), this provides a strong theoretical basis for the GLM as it adheres to the RNR model, and although empirical support for the GLM in sexual offending treatment was not widespread at this time, similar treatment models used in clinical psychology such as Motivational Interviewing (Miller & Rollnick, 1991) were well supported.

1.2.5. Good Lives Model-Comprehensive.

The Good Lives Model-Comprehensive (GLM-C) is an updated version of the GLM that incorporates the general principles and assumptions outlined by the original model. However, the GLM-C also incorporates an understanding of the etiology of sexual offending while providing implications for treatment that the original GLM did not address (Ward & Gannon, 2006). The etiological grounding of the GLM-C arose from Ward and Beech's (2005) Integrated Theory of Sexual Offending (ITSO), and Ward and Gannon (2006) suggested it is the combination of the principles proposed by the original GLM, as well as the etiological understanding explained by the ITSO that develops existing therapeutic practice into meaningful treatment. The GLM-C places emphasis on treatment meeting the best interests of

the individual and the community, while also integrating epistemic or knowledge related values. The GLM-C involves acknowledging the best practice available.

According to Ward and Gannon (2006), treatment adhering to the GLM-C assumes that humans seek primary goods much like the original GLM, however it allows the individual to identify their own values and preferences in a context that provides the opportunity to construct a more adaptive personal identity. Therefore, Ward and Gannon (2006) suggested treatment following the GLM-C should involve the detection of the clinical phenomena causing the sexually harmful behaviour. This requires identifying the criminogenic needs in an individual, as well as the presence of five potential symptom clusters associated with sexual offending. These symptom clusters include emotional problems, social difficulties, offence supportive beliefs, empathy deficits, and deviant arousal. These symptom clusters are considered obstacles that prevent the individual from living a good life. Therefore, Ward and Gannon (2006) suggested individuals with many of these symptom clusters are regarded high risk, and use sexual offending as a direct route to pursue their primary goods. On the other hand, individuals considered low risk have fewer symptom clusters and use sexual offending as an indirect pathway.

Treatment adhering to the GLM-C involves assessing the individual using an open-ended interview schedule, and identifying a pre-eminent primary good. This primary good will become the central focus of the treatment plan, with the notion that other goods can be ascertained around it. The formulation of a treatment plan will occur, and the therapist should identify the primary goods pursued by the individual that had led to their sexually harmful behaviour. A case formulation is then developed to explain the connection between the Good Lives plan, criminogenic needs, offending route, and the individual's psychosocial development. The GLM-C emphasises that the Good Lives plan should maximise the individual's opportunity to live a fulfilling life (Ward & Gannon, 2006).

Ward, Mann, and Gannon (2007) suggested the application of the GLM-C in a sexual offending treatment context is beneficial, as it provides motivation to change in individuals that exhibit maladaptive behaviour even in cases that are considered difficult to manage. Furthermore, due to the underpinnings of the GLM-C being well supported in areas such as evolutionary psychology and well-being research, Ward et al., (2007) emphasised the external consistency of the model.

1.3. Feedback-Informed Treatment (FIT)

While the literature has made important contributions to the understanding of the etiology of sexual offending and treatment targeting the factors underlying it, another side of effective therapy lies within Feedback Informed Treatment (FIT). According to Black et al. (2017), monitoring factors across treatment such as client functioning across multiple domains, as well as therapeutic alliance, has shown beneficial outcomes when compared to treatment as usual. Monitoring these factors has demonstrated effective therapy outcomes across healthcare settings, particularly in regards to the therapeutic relationship (Jensen & Kelley, 2016). Therefore, the following section will review the literature on FIT, and the implications it has had on therapeutic outcomes across settings including sexual offending treatment.

1.3.1. FIT in Clinical Settings.

According to Lambert et al. (2001) clinical trials and effectiveness studies have continuously demonstrated an overall positive effect in clients receiving therapy for various psychological disorders. In a meta-analytic review of psychotherapy effectiveness, Lambert and Bergin (1994) found consistently significant effect sizes for positive outcomes in patients receiving psychotherapy for disorders such as depression, anxiety, and eating disorders. Furthermore, Lambert and Bergin found at the end of treatment, 80% of individuals who

received treatment had better outcomes than those who did not receive treatment. However, Lambert et al. (2001) found a small proportion of cases worsen whilst in treatment, and therefore, deterioration in clients has been a significant focus in psychotherapy research. According to Lambert (2010), this research has been mostly centred on how to implement the best practices of care supported by empirical evidence to reduce deterioration in clients. These practices evolved in the 1990s to include the use of outcome assessment to monitor treatment progress, which often involved collecting client feedback over the course of treatment. Lambert (2010) noted outcome monitoring has been referred to as patient-focused research, which aims to improve psychotherapy outcome by efficiently monitoring client progress throughout treatment. This allows the clinician to be informed of any issues the client may be experiencing during treatment, and therefore, these can be addressed before the client terminates treatment, or obtains a negative or null outcome.

In a meta-analysis by Lambert et al. (2003), three studies were analysed to investigate the overall effect of obtaining client feedback and implementing it in conjunction with therapy. The experimental groups completed the Outcome Questionnaire-45 (OQ-45) (Lambert & Finch, 1999) at baseline, throughout treatment, and at the conclusion of treatment. The control groups completed the OQ-45 at baseline and at the conclusion of treatment only. The OQ-45 is a 45-item questionnaire developed by Lambert and colleagues as a measure for client functioning across various domains, such as mood, relationships, and physical well-being. The OQ-45 was originally designed to be a screening instrument for client referrals (Lambert, Gregersen, & Berlingame, 2004). Lambert et al. (2003) predicted treatment outcome by scores on the OQ-45 at baseline, and OQ-45 scores collected at the conclusion of treatment were used for comparison across the experimental and control groups. Client deterioration was determined by a decrease of 14 points on the OQ-45 when compared to baseline. The results from the Lambert et al. (2003) meta-analysis suggested that monitoring

client progress over the course of treatment reduces client deterioration in those predicted to obtain a negative outcome, with the experimental groups predicted to obtain a negative outcome deteriorating at an overall rate of 13 percent, compared with 21 percent in the control groups who did not have their progress monitored throughout treatment. These results produced a medium effect size of 0.39, according to Lipsey's (1990) criterion (Lambert et al. 2003).

Meanwhile, Whipple, Lambert, and Vermeersch (2003) suggested that treatment outcomes could be improved further by utilising clinical support tools (CSTs) in conjunction with outcome monitoring for clients predicted to obtain poor treatment outcome. These tools include monitoring the therapeutic relationship, matching therapeutic techniques with a client's motivation to change, and identifying ways of enhancing social supports. In their study, Whipple et al. (2003) found that implementing CSTs in a sample of clients predicted to obtain a poor treatment outcome lead to a larger number of clients reaching reliable change (statistically significant) or clinically significant change (change with practical implications) than those who had their outcome monitored without the use of CSTs.

1.3.2. Partners for Change Outcome Management System (PCOMS).

Due to evidence suggesting that routinely and efficiently monitoring client progress and outcome throughout the course of treatment can improve treatment outcome, Miller, Duncan, Sorrell, and Brown (2005) developed the Partners for Change Outcome Management System (PCOMS). PCOMS is a client feedback programme that aims to monitor client progress throughout treatment. It was designed to be efficient for both the client and therapist to avoid noncompliance in the client and time constraints for the therapist. Therefore, as opposed to implementing lengthy questionnaires such as the OQ-45, PCOMS utilises the Outcome Rating Scale (ORS) and the Session Rating Scale (SRS). The ORS is a scale that also measures client outcome, however, consists of only four items and is therefore less time-

consuming and more feasible for use in every therapy session (Miller et al. 2005). The SRS is also a scale consisting of only four items and is recommended for use in conjunction with the ORS to efficiently track therapeutic alliance in every treatment session. When implemented in clinical treatment for disorders such as anxiety, depression, and substance abuse, PCOMS produced a significant increase in treatment effectiveness, with the effect size of treatment more than doubling after the introduction of PCOMS compared to scores at baseline (Miller et al. 2005).

The ORS and the SRS were developed to track client functioning and quality of therapeutic alliance in a manner that was simple and inexpensive for both the client and clinician (Duncan et al. 2003; Miller et al. 2003). The ORS measures client well-being over four domains; individual, interpersonal, social, and overall well-being, and the SRS measures four domains of therapeutic alliance; relationship quality, agreement around treatment goals, agreement around treatment method, and overall perception of the session (Duncan et al. 2003; Miller et al. 2003). According to Miller et al. (2003), the ORS was developed as a brief alternative to the OQ-45 due to the length of time and expense involved with the use of the OQ-45. Therefore, the personal, interpersonal, and social areas of functioning were chosen to be the main measures in the ORS due to changes in these four areas being widely linked to successful treatment outcomes.

In terms of the SRS, Duncan et al. (2003) suggested that a positive therapeutic alliance is one of the best predictors of treatment effectiveness with an average correlation of $r = .26$ between alliance and outcome. However, tools measuring alliance between the therapist and client were extensive and time consuming, and they mostly existed for research purposes. Duncan et al. (2003) also suggested that client ratings are more effective predictors of alliance than therapists' ratings, however a tool designed to measure this across treatment did not yet exist. These factors prompted the construction of the SRS, so client ratings of

therapeutic alliance could be collected in each therapy session. Three pre-existing scales

influenced he construction of the SRS, including the *Working Alliance Inventory* (Horvath &

Greenburg, 1989)*,* which measures the agreement on treatment targets, the *Session*

Evaluation Questionnaire (Stiles, 1980), which measures the depth and delivery of treatment,

and the *Empathy Scale* (Burns & Nolen-Hoeksema, 1992), which specifically addresses

therapist and client relationships (Duncan et al. 2003).

　According to Miller and Bargmann (2012), tracking client well-being and therapeutic

alliance using the ORS and SRS adheres to evidence-based practice. The American

Psychological Association defines evidence-based practice in psychology as "the integration

of the best available research with clinical expertise in the context of patient characteristics,

culture, and preferences" (APA, 2006, p. 273). According to APA (2006), clinical expertise,

in part, involves monitoring patient progress in treatment, and Miller and Bargmann (2012)

suggested monitoring treatment progress can be done by utilizing the ORS and SRS. In

practice, Miller and Bargmann (2012) advised that the clinician provide a rationale to the

client at the beginning of treatment as these scales are introduced. This briefing is done to

create an atmosphere where the client can comfortably provide feedback. The ORS is given

to the client to fill out at the beginning of the treatment session, and the SRS is given to the

client at the conclusion of the session. The client is asked to answer each of the four questions

by marking a point on a 10-centimetre line, and their score for each item is determined by the

distance in centimetres between the client's mark and the left marker at the beginning of the

line. The four marks are then summed to obtain the total score for both the ORS and SRS

(Miller & Bargmann, 2012).

　Based on a study by Miller et al. (2003), Miller and Bargmann (2012) determined that a

score of 25 is the line that differentiates a clinical and non-clinical population, as the average

ORS score at treatment intake for the clinical population was 19 with a standard deviation of

8.7 (Miller et al. 2003). Miller and Bargmann (2012) then argued that whatever the initial

ORS scores are, treatment services should increase these scores. However, around 25 to 33%

of individuals score above the clinical cut-off. Miller and Bargmann (2012) suggested the

most common reason for this is because some individuals receive mandated (authoritatively-

ordered) treatment. According to Miller and Bargmann (2012), the scores on the SRS should

remain high throughout, as Duncan et al. (2003) noted clients consistently rate measures of

therapeutic alliance highly. Therefore, a score of below 36 suggests a cause for concern in the

relationship between the client and clinician. If this is the case, the clinician should address

this with the client to investigate different ways of approaching the treatment process in a

way that appeals to the client. Miller and Bargmann (2012) noted that evidence is emerging

where therapists initially obtaining negative feedback that effectively address issues can

obtain more positive outcomes than a therapist obtaining consistently positive feedback. If

the clinician has addressed any issues that the client has reported and treatment continues to

produce low scores on SRS, then it is up to the client and clinician to discuss transferring the

client to an alternate clinician where a stronger therapeutic alliance may be formed (Miller &

Bargmann, 2012).

1.3.3. FIT in Sexual Offending Treatment.

In a meta-analysis by Hanson, Bourgon, Helmus, and Hodgson (2009), treatment for

sexual offending showed larger reductions in recidivism when the treatment programmes

adhered to Andrews and Bonta's Risk, Need, Responsivity principles. Furthermore, due to

the growing literature supporting the use of Feedback Informed Treatment (FIT) in clinical

and substance abuse settings, Prescott and Miller (2014) noted that FIT allows the clinician to

monitor and tailor treatment in a way that maximises treatment outcome for the individual,

which enhances client responsivity. However, most treatment progress in those who have

committed a sexual offence has been monitored by investigating change in dynamic risk

factors, and does not consider client well-being or therapeutic alliance. Therefore, Prescott and Miller (2014) investigated progress in a sexual offending treatment programme using the ORS and SRS in a case example with an individual convicted of sexual assault.

The individual initially presented in treatment with an ORS score of 30, which suggested the individual was not considered clinically distressed. However, when the therapist addressed deeper factors behind the individual and his offending, the individual became less guarded and his ORS score reduced to 15. A score of 15 suggested the individual had levels of personal, interpersonal, social, and overall functioning comparable to a clinically distressed population. However, at the conclusion of this session, the SRS score of 39 represented a strong therapeutic alliance. This meant the individual and clinician were able to discuss meaningful treatment goals and how the individual and the therapist could work together to increase his ORS score. The client and clinician were able to address the underlying issues the individual was experiencing in the following treatment sessions, and the ORS scores then increased back to 30. Prescott and Miller (2014) used this case to emphasise the effectiveness a strong therapeutic alliance has on treatment outcome. Furthermore, they emphasised how early detection of low personal, interpersonal, and social functioning can prompt the clinician to tailor treatment to address individual needs, which may in turn avoid early treatment termination.

1.4. Risk Measurement

As a central aspect of treatment for sexual offending, this section will review the development of risk assessment tools, and their role in assigning appropriate treatment intensity. According to Hanson, Helmus, Babchishin, and Thornton (2016), a tool that measures risk of sexual recidivism in an individual based on their demographic and criminal history information is required to categorise their risk level. Appropriate risk identification is essential to maximise treatment effectiveness, due to evidence suggesting that assigning

mismatched levels of treatment intensity can increase rates of recidivism (Andrews &

Bonta, 2017). Furthermore, Hanson, Helmus, and Harris (2015) noted most individuals

convicted of sexual offending spend a large proportion of their sentence under community

supervision, and the accurate identification of risk can assist the community supervision

officers with setting appropriate conditions and treatment plans for the individual.

1.4.1.   Risk Measurement Using the Static-99R.

Various tools have been constructed to measure risk in individuals convicted of a sexual

offence. However, the Static-99 (Hanson & Thornton, 2000) is the most commonly used

measure of static risk that assesses factors directly associated with reoffending such as age

and history of offending (Hanson, Lunetta, Phenix, & Neely, 2014). The Static-99 is an

empirically derived risk measurement tool, and has been used to predict sexual recidivism

and violent sexual recidivism (Hanson & Thornton, 2000). However, the Static-99

overestimated reoffending rates in older individuals, and therefore the Static-99R was

developed with revised age weights (Helmus, Thornton, Hanson, & Babchisin, 2012). The

Static-99R has higher predictive accuracy than the Static-99 as it more accurately predicts

recidivism in older individuals (Helmus et al., 2012).

1.4.2.   Risk Measurement Using the Stable-2007.

According to Hanson et al. (2015), the Stable-2007 (Hanson, Harris, Scott, & Helmus,

2007) is the most commonly used scale to measure dynamic risk factors in those who have

engaged in harmful sexual behaviour. Sexual self-regulation, general self-regulation, social

relationships, and cooperation with supervision are examples of dynamic risk items measured

by this scale. The Stable-2007 is a product of quantitative research reviews, interviews with

community supervision officers, and other scales measuring dynamic risk. According to

Sowden and Olver (2017), while measuring static risk in individuals is useful for determining

the likelihood of reoffending and type of reoffending likely to occur, measuring dynamic risk

factors provides targets for treatment as well as the ability to measure change in risk over the

course of treatment. Therefore, measuring both static and dynamic risk in an individual is the

most effective method in identifying appropriate treatment intensity as well as treatment

targets and change in risk.

The Stable-2007 is a 13-item dynamic risk scale developed from the 16-item Stable-2000

(Hanson et al. 2007). Psychometrically weaker items from the Stable-2000 were removed for

the Stable-2007 and items with higher predictive ability in the Stable-2000 were given more

weight in the Stable-2007 (Sowden & Olver, 2017). According to Hanson, Helmus,

Babchishin, and Thornton (2015), the most effective kind of risk assessment occurs when

static and dynamic risk factor measurement tools are used in conjunction. Furthermore,

measuring dynamic risk factors provide higher levels of predictive accuracy for recidivism

due to the comprehensive assessment process.

1.4.3. Risk Measurement Using the Violence Risk Scale: Sexual Offence Version (VRS:SO).

The VRS:SO was developed as a risk prediction tool for those convicted of a sexual

offence. It was based on the Violence Risk Scale (VRS) (Wong & Gordon, 2006), which was

developed as a fourth generation risk assessment tool in order to assess, manage, and treat

those convicted of a violent offence. Fourth generation risk assessment tools assess risk and

criminogenic needs in an individual, however, they also place emphasis on structured

monitoring of the case, which also adheres to the responsivity principle (Andrews & Bonta,

2017).

The VRS:SO consists of a 7-item scale measuring static risk factors and a 17-item scale

measuring dynamic risk factors directly related to sexual offending (Olver, Wong,

Nicholaichuk, & Gordon, 2007). These items are rated on a 4-point scale ranging from zero

to three. 24 static items identified in the sexual offending literature were coded and correlated with recidivism. They were then tested in a cross-validation study, and the seven items with the highest predictive ability were included as the static factors in the scale. The dynamic component of the VRS-SO was developed through identifying key theoretically and empirically supported dynamic risk variables (Olver et al., 2007).

According to Olver et al. (2007), change in pre-treatment and post-treatment VRS:SO scores are measured by applying a modified version of the Trans-Theoretical Model of Change (TTM) (Prochaska, DiClemente, & Norcross, 1992) to dynamic items. The Trans-Theoretical Model of Change suggests that individuals receiving treatment progress through five stages of change including: (1) Pre-contemplation – where the individual does not believe there is a problem and therefore is not considering behaviour change, (2) Contemplation – where the individual is aware of the problem and is considering behaviour change, (3) Preparation – where the individual intends to change and engages in risk reduction behaviours, (4) Action – where the individual takes control in overcoming problems, and (5) Maintenance – where the individual directs efforts to maintain change and prevent relapse (Prochaska, DiClemente, & Norcross, 1992). The TTM has been utilised in a treatment population of those who have committed a sexual offence, and appears to be an effective model for measuring treatment progress and change (Tierny & McCabe, 2005). According to Olver et al. (2007), the TTM is applied to the dynamic items considered a necessary treatment target in the VRS:SO at pre-treatment and post-treatment to assess change in risk. Each progression to the next step in the five stages of change deducts 0.5 off the pre-treatment rating on the specified dynamic item, meaning there has been a reduction in risk. The only exception to this is the progression from pre-contemplation to contemplation, where no deductions are made due to the fact that there has been no actual behaviour change. Olver et al. (2007) suggested assessing change in risk using the VRS:SO is advantageous, as

the descriptions based on the TTM stages of change allow the therapist to assess change in a context where the individual has not had the chance to exhibit directly risky behaviour, such as in a prison or forensic setting. Furthermore, it allows therapists to assess how much change has occurred in therapy.

1.5. STOP Adult Service: Current Research Setting

STOP is a community treatment facility in Christchurch, New Zealand that provides either mandated (authoritatively-ordered) or non-mandated treatment for individuals who have engaged in concerning or harmful sexual behaviour. STOP provides services for children, adolescents, and adults. The adult service treats males and females over the age of 18 who have either engaged in a contact offence with a child or vulnerable adult, or a non-contact offence such as indecent exposure or viewing and/or distributing objectionable material. STOP incorporates high quality and internationally supported best practice forms of intervention (E. Scott, personal communication, February 28, 2018). Lambie and Stewart (2012) investigated the effectiveness of community-based treatment programmes in New Zealand, and found the total recidivism rate was 8.1 percent for the groups who received community treatment versus 21 percent for the groups assessed without treatment. The Christchurch adult services (STOP) had a recidivism rate of 5.6 percent at the five-year follow up.

According to E. Scott (Stop Team Leader) (personal communication, February 28, 2018), treatment adheres to the Andrews and Bonta (2017) RNR principles. Therefore, low-risk service users are assigned a lower intensity level of treatment than high-risk service users. Static risk factors are measured using the Static-99R, and dynamic risk factors are measured using the Stable-2007. Based on the rules for combining static and dynamic risk scores proposed by Hanson et al. (2007), a combined risk score between one and five is then assigned to service users based on their static and dynamic risk totals. The VRS:SO was

recently implemented in addition, to measure both static and dynamic risk factors and to assess change. Higher risk individuals require 12 months to complete the core programme, while lower risk individuals attend a reduced intensity programme of about six months duration, and not more than 100 therapy hours. Regardless of risk, individuals will generally attend weekly group sessions and fortnightly individual sessions. If an individual does not attend group treatment for any particular reason, they will attend weekly individual sessions.

According to E. Scott (personal communication, February 28, 2018) the treatment programme utilised by STOP is heavily influenced by the GLM-C, and also incorporates aspects of Cognitive Behavioural Therapy (CBT) and Relapse Prevention (RP). Treatment targets are based on criminogenic needs, including offending patterns, as well as relationships, healthy sexuality, emotional and self-regulation, and core work designed to enhance motivation to change. Higher risk service users complete additional modules such as victim awareness and perspective taking individually or in a group setting, and lower risk service users may complete additional modules if required. Early modules involve enhancing motivation to change, developing an understanding of abusive behaviour, and identifying risks and defining goals. Later modules involve the development of pro-social sexual behaviour, self-regulation and self-management, building relationship and intimacy skills. The final module involves self-reflection, understanding old behaviour, and linking new behaviour to individual values. Individual sessions also have the added focus of developing treatment goals and implementing New Life plans. Homework tasks are a key component for both group and individual sessions.

To adhere to the responsivity principle, treatment is tailored to suit the needs of the individual as identified at assessment. The programme also collects client feedback to track client well-being in four domains including individual, interpersonal, social, and overall functioning using the ORS at the beginning of each individual session. Client feedback is also

collected on how relevant, useful, and practical they found each individual session using the SRS, which is implemented at the conclusion of each treatment session (E. Scott, personal communication, February 28, 2018).

1.6. Overview of Current Study

In summary, providing effective treatment for those with a history of sexual offending has been a central focus in the sexual offending literature, and both empirically and theoretically supported models have been implemented in treatment programmes with the aim of reducing risk and recidivism. STOP is a community treatment programme in Christchurch, New Zealand, which incorporates CBT, RP, and the GLM-C in their adult service. Client well-being and therapeutic alliance are also measured in individual treatment sessions using the ORS and SRS. Due to the feedback clinicians receive from these scales in each session, treatment sessions can be tailored to suit the needs and treatment goals for each individual. According to Prescott and Miller (2014) tailored treatment and effortful understanding of issues that arise can lead to meaningful engagement in treatment, which adheres to responsivity principle proposed by Andrews and Bonta (2017).

The current study does not represent the first attempt to research client well-being and therapeutic alliance in a population with a history of sexual offending (Prescott & Miller, 2014), however it is the first to investigate the utility of the ORS and SRS in a sexual offending treatment context using a quantitative analysis. As Miller and Bargmann (2012) suggested, individuals typically enter treatment with ORS scores falling below 25. Furthermore, the etiological theories outlined suggest those engaging in harmful sexual behaviour experience a multitude of deficits in their personal, interpersonal, and social well-being (Finkhelhor, 1986; Hall & Hirschman, 1991; Marshall & Barbaree, 1990; Ward & Beech, 2005; Ward & Siegert, 2002). Therefore, due to the GLM-C using a strengths-based approach while considering the best interests of the individual, it is hypothesised that scores

on the ORS will initially fall below the clinical cut-off of 25 and will significantly increase over treatment, and scores on the SRS will either fall below the recommended cut-off and significantly increase, or remain high throughout.

Due to the limited literature on FIT in a sexual offending treatment context, further questions to be addressed in an exploratory manner in the current study include what these tools can tell us about the experiences of individuals in sexual offending treatment, and how scores on these scales relate to other setting-specific variables not identified in previous FIT literature. These will include comparing differences across various sub-groups identified within the study sample, such as those with or without new convictions, those who complete or do not complete treatment, and those with mandated or non-mandated referrals. Furthermore, this research will investigate the relationship between ORS and SRS scores and risk scores. The findings from these research questions should have implications regarding the usefulness of the ORS and SRS in populations who have engaged in harmful sexual behaviour.

Method

2.1. Design

This study is retrospective as it arose after data collection. To address the hypothesis and additional research questions, a mixed subjects design was utilised. The within subjects test consisted of a comparison of ORS and SRS scores obtained at pre-treatment and post-treatment. The between subjects tests were conducted by assigning service users to groups based on their combined risk level, treatment completion status, cooperation with supervision, offence type, referral source, and reconvictions. Fernandez et al. (2014) suggested the score on the Stable-2007 item 'cooperation with supervision' is linked to the therapeutic alliance, and therefore a specific comparison will be made using this item. Differences in ORS and SRS change scores were then compared amongst these groups.

Consistent with the rules of combining static and dynamic risk scores proposed by Hanson et al. (2007), users were assigned to one of five groups based on their combined risk score on the Static-99R and Stable-2007 (low risk, moderate-low risk, moderate-high risk, high risk, and very high risk). Based on the Stable-2007 scoring criteria for the cooperation with supervision item (Hanson et al. 2007), service users were assigned to one of three groups based on their cooperation with supervision score; cooperative (item score of zero), moderate issue with cooperation (item score of one), non-cooperative (item score of two). Two categories were created for treatment completion status (completed; not completed), offence type (contact; non-contact), and referral source (mandated; non-mandated). Two categories were also created for reconvictions amongst the mandated service users (no new convictions; reconvicted). According to Olver et al. (2007), the VRS:SO was designed, in part, to assess treatment change. However, due to the limited number in this sample obtaining scores on the VRS:SO at both pre and post-treatment, treatment change scores were not measured. More detailed information regarding all variables can be found below in section 2.3. Measures.

2.2. Participants

65 clients who participated in the STOP community treatment programme between 2013 and 2017 formed the sample for this study. Participants received either mandated referrals from the New Zealand Department of Corrections (50.8%), or non-mandated referrals from a health professional, family member, or family friend (49.2%). 64 participants were male, and one participant was female. The minimum age at the time data was collected for this research was 19.90, and the maximum age was 72.21. The mean age at the time data was collected for this research was 39.03 with a standard deviation of 13.56. Their referral documentation described the participants as "NZ European" (75.3%), "Maori" (12.3%), "Other" (9.1%), or "not identified" (3%). Five participants were identified as non-completers, with reasons behind attrition including non-engagement in treatment, being remanded in custody, or

receiving a custodial sentence. Participants provided informed consent for their anonymised information to be used for research purposes, and the University of Canterbury Human Ethics Committee approved the research.

2.3. Measures

The Outcome Rating Scale (ORS), the Session Rating Scale (SRS), the Stable-99R, the Static-2007, and the VRS:SO were utilised in this study.

2.3.1. Outcome rating scale.

The ORS measures individual well-being across four domains, including individual (personal well-being); interpersonal (family, close relationships); social (school, work, friendships); and overall functioning (general sense of well-being). It is presented as a visual analogue scale with a ten-centimetre line for each item (Miller et al., 2012). The client marks a point on the line that best represents how they are functioning in that area. Scores are determined by the distance in centimetres from where the client has marked on the line and the beginning of the line from the left, and are determined as a rating out of 10. The four marks on each item are then summed together to generate a total score, with a maximum rating of 40. Miller and Bargmann (2012) suggested a score of 25 is the line that differentiates a clinical and non-clinical population, with those scoring below 25 being considered clinically distressed. Miller et al. (2003) reported strong internal consistency for the ORS ($\alpha = .93$) and moderately strong test re-retest reliability ($r = .66$). The ORS has shown moderate concurrent validity, which was measured using the Outcome Questionnaire 45 (OQ-45) (r = .59).

2.3.2. Session rating scale.

The SRS is also a visual analogue scale that measures therapeutic alliance across four domains, including the relationship between the client and the therapist, whether the

treatment session addressed the client's goals, therapist approach, and their overall perception

of the session (Miller et al., 2012). Scores are also determined by the distance in centimetres

from where the client marks on the line and the beginning of the line from the left, and are

determined as a rating out of 10. The four marks on each item are then summed together to

generate a total score, with a maximum rating of 40. Miller and Bargmann (2012) suggested a

score of 36 or above indicates a strong therapeutic alliance, and scores falling below 36

suggest there are issues within the therapeutic alliance that should be addressed. Duncan et al.

(2003) reported strong internal consistency for the SRS (α = .88) and a moderately strong test

re-test reliability (r = .64). The SRS has shown moderate concurrent validity, which was

measured using the Helping Alliance Questionnaire II (HAQ-II) (r = .48).

2.3.3 Risk Measures

2.3.3.1. Static-99R.

The Static-99R is a risk assessment tool that measures the likelihood of reoffending based

on static risk factors (Helmus et al. 2012). The scale contains 10 items assessing criminal

history, relationship history, age, and characteristics of the victims. Scores can range from -3

to 12, and are categorised into four levels of risk: low (-3 to 1), moderate (2 to 3), moderately

high (4 to 5), and high (6 to 12). The Static-99R has shown moderately strong predictive

accuracy with regard to recidivism at 5 years (AUC = .72) and 10 years (AUC = .71),

respectively (Helmus et al., 2012). The intra-class correlation found by Hanson, Lunetta,

Phenix, Neeley, and Epperson (2014) suggests strong inter-rater reliability (ICC = .78). The

Static-99R is designed for use on those convicted of a sexual offence with an identifiable

victim, and is not recommended for use on females, those under the age of 18, or those

convicted of viewing or distributing objectionable material (Phenix et al., 2016).

2.3.3.2. Stable-2007.

The Stable-2007 (Hanson et al., 2007) is also a risk assessment tool that measures the likelihood of reoffending based on dynamic risk factors, and was designed for use in conjunction with the Static-99R. The Stable-2007 contains 13 items measuring factors such as social functioning, intimacy deficits, sexual self-regulation, general self-regulation, and cooperation with supervision. Scores are obtained on a 3-point rating scale from zero to two (0 = *no problem,* 1 = *slight problem,* and 2 = *definite concern*), and are summed to obtain a total score. A score between zero and three suggests low risk, a score between four and 11 suggests moderate risk, and a score above 12 suggests high risk. Hanson et al. (2007) reported moderately strong accuracy in predicting recidivism for the Stable-2007 (AUC = .67), and strong inter-rater reliability (ICC = .79). The Stable-2007 is designed for use on those over the age of 18 who committed a sexual offence with an identifiable victim. It is not designed for use on females, individuals under the age of 18, or those who viewed or distributed child pornography (Fernandez, Harris, Hanson, & Sparks, 2014). A risk rating on the Stable-2007 was not assigned to those who did not meet the criteria for risk assessment using this measure. In these cases, the clinicians at STOP utilise the instrument to identify treatment targets and treatment needs.

2.3.3.3. Combined Risk Scoring.

According to Hanson et al. (2007), predictive risk accuracy is improved when static and dynamic risk factors are combined using a structured approach. Service users meeting criteria to be assessed for risk on both the Static-99R and Stable-2007 were assigned a combined risk score based on the combined coding rules outlined by Hanson et al. (2007). Scores using this approach range from one to five (one = *low risk,* two = *moderate-low risk*, three = *moderate-high risk*, four = *high risk*, and five = *very high risk*).

2.3.3.4. Violence Risk Scale: Sexual Offence Version.

The VRS:SO is a risk assessment tool that measures both static and dynamic risk in those convicted of a sexual offence at pre-treatment and post-treatment (Olver et al., 2007). The static component of the VRS:SO contains seven items related to sexual reoffending such as age at first sexual offence, sexual offending history, and victim gender. Scores are obtained on a four-point rating scale from zero to three and are summed to obtain a total score. The dynamic component of the VRS:SO contains 17 items related to sexual reoffending such as deviant sexual preference, cognitive distortions, and offence planning. Scores are obtained on a four-point rating scale ranging from zero to three and are summed to obtain a total score. The dynamic items are reassessed at post-treatment and are scored based on the individual's progress through the five stages of change in the Trans-Theoretical Model (Prochaska, DiClemente, & Norcross, 1992). Each progression to the following stage of change deducts 0.5 points from their score on a particular item, with the exception of progression from pre-contemplation to contemplation due to a lack of actual behaviour change. According to Olver et al. (2007), the VRS:SO has moderately strong accuracy in predicting recidivism at both pre-treatment (AUC = .71), and post-treatment (AUC = .72). The VRS:SO total also showed moderate concurrent validity with the Static-99 at pre-treatment ($r = .55$) and post-treatment ($r = .54$).

2.3.4. Recidivism.

Recidivism follow-up data was obtained from the New Zealand Ministry of Justice. To protect the identities of the service users in the programme not known to authorities for their harmful or concerning sexual behaviour, recidivism data was obtained only for those who received mandated treatment, resulting in a subsample of $n = 31$. Dates of interest followed the first treatment session where the ORS and SRS were utilised. Recidivism data was categorised, and the presence of any new sexual, violent, or general convictions, as well as

breach of sentence conditions since the date of interest was recorded. The presence of violent

and general offending, as well as breach of sentences were considered as rates of sexual

reoffending were expected to be low, with Lambie and Stewart (2012) reporting an average

of 5.6% of New Zealand community treatment programme completers being reconvicted at

the five-year follow up. Breach of sentence conditions occur when individuals fail to comply

with any condition of a community sentence without reasonable excuse, and/or fail to report

to a probation officer when required to do so (Sentencing Act 2002, s. 70). In a sexual

offending treatment context, failing to comply with a community sentence could also involve

non-compliance to safety plans, non-attendance to treatment sessions, or lack of engagement

during intervention (E. Scott, personal communication, 7 March, 2018).

2.4. Procedure

Upon entering treatment, clients were briefed on the possibility of their anonymised

information being used for research purposes, and signed a consent form providing

permission for this. At the beginning of treatment, static risk for convicted clients with an

identifiable victim was measured using the Static-99R, and dynamic risk for clients with an

identifiable victim was measured using the Stable-2007. Clients who did not have any

convictions for a sexual offence, committed the offence when they were under 18, were

female, did not have an identifiable victim, or were receiving treatment for viewing or

distributing objectionable material were not assessed for risk using the Static-99R, as the

Static-99R was not designed for use on individuals meeting these criteria. Furthermore,

clients who committed the offence when they were under 18, were female, did not have an

identifiable victim, or were receiving treatment for viewing or distributing objectionable

material were not assessed for risk using the Stable-2007, as the Stable-2007 was not

designed for use on individuals meeting these criteria. For clients who did not meet the

criteria to be assessed for risk level on the Stable-2007 this tool was used to assess treatment

needs and identify key treatment targets. Risk measurement using the VRS:SO was introduced in the programme in 2015, after which static and dynamic risk were also measured with this tool in conjunction with the Static-99R and Stable-2007.

For clients rated on both the Static-99R and Stable-2007, a combined risk rating was assigned to identify the appropriate level of treatment intensity. Those who did not meet the criteria for risk assessment using these tools were assigned a level of treatment intensity based on their treatment targets and needs. In general, service users received weekly group sessions and fortnightly individual sessions. Individuals not receiving group treatment attended weekly individual sessions. Treatment sessions lasted for one hour. In the first and subsequent individual sessions, clients were asked to complete the ORS and SRS in paper form. Clear instructions were provided on how to fill them out, and clients were given the opportunity to ask any questions or express concerns. The ORS was distributed at the beginning of individual sessions and the SRS was distributed at the conclusion of individual sessions. No time restriction was placed on the completion of each scale. Once clinicians collected completed ORS and SRS scales after each session, a total score for each scale was generated and entered into an Excel spreadsheet. Once treatment had been completed, client risk was measured again using the Static-99R and the Stable-2007. From 2015 onwards, treatment progress and risk at pre and post treatment was also measured using the VRS:SO.

Data was collected for the purposes of this study by and extracting risk scores from each client file, ORS and SRS scores, demographic information, referral sources, offence type, and attrition rates into an anonymised data set. Data on how service users responded to authority was also extracted and coded by using the item 'cooperation with supervision' on the Stable-2007 and assigning a score of zero as cooperative, one as having a moderate issue, and two as being uncooperative.

2.5. Data Analysis Plan

   To investigate the research question, descriptive statistics on all measures and recidivism will first be explored. Due to service users receiving a varied number of treatment sessions to suit their individual needs, trends of ORS and SRS scores across the sample for each session (i.e. first session, second session, and so on) will be presented in box plots over the main proportion of sessions received. Change on both scales will be explored by comparing ORS and SRS scores obtained at the beginning of treatment with ORS and SRS scores obtained in the individual's final session. This comparison will be made using a dependent samples t-test, or the non-parametric equivalent, depending on whether the assumption of homogeneity of variance is met.

   Due to research on the ORS and SRS suggesting the main focus of these scales is how the scores change over treatment (Miller & Bargmann, 2012), change scores on both scales will be compared between a number of sample sub-groups. The groups with two categories (i.e., completers and non-completers, mandated and non-mandated, contact and non-contact, new convictions and no new convictions), will be compared using independent samples t-tests, or the non-parametric equivalent. The groups with three or more categories (combined risk, cooperation with supervision) will be compared using one-way ANOVAs, or the non-parametric equivalent. Furthermore, due to research on the ORS suggesting those receiving mandated treatment may enter into services with scores above the clinical cut-off (Miller & Bargmann, 2012), a comparison will be made between mandated and non-mandated service users with regard to their ORS baseline scores. Although Miller and Bargmann (2012) did not explicitly state SRS scores may also differ between mandated and non-mandated service users, for the exploratory purposes of this study, a comparison will be made between the two referral types and their SRS baseline scores as well. These comparisons will be made using an independent samples t-test, or the non-parametric equivalent.

The relationships between ORS and SRS scores and client risk as measured by the Static-99R, Stable-2007, and the VRS:SO collected before and after treatment completion will then be explored using Pearson Correlation Coefficients and presented in a Correlation matrix. The relationship between ORS and SRS scores and combined static and dynamic risk scores will be explored using Spearman's Rank Correlation Coefficients, and the relationship between ORS and ORS scores and age will also be explored using Pearson Correlation Coefficients and presented in the Correlation matrix.

Results

3.1. Descriptive Statistics

Descriptive statistics were obtained for treatment session frequency, and ORS and SRS score frequencies. The distribution of number of treatment sessions was plotted in a frequency graph.

Table 1 presents the descriptive statistics for frequency of treatment sessions, ORS scores, and SRS scores. As Table 1 shows, the frequencies closely match, indicating that ORS and SRS scores were collected in nearly all treatment sessions. However, slightly more ORS scores were obtained than SRS scores.

Table 1

Descriptive Statistics for Frequency of ORS and SRS Scores and Treatment Sessions

	M	*SD*	*Median*	Minimum	Maximum
ORS Frequency	14	7.81	14	1	32
SRS Frequency	13.81	7.96	14	1	32
Session Frequency	14.02	7.80	14	1	32

Figure 1 presents the frequency distribution of individual treatment sessions across the sample. As Figure 1 shows, only a small number of service users received more than 21 individual treatment sessions, with the majority receiving between ten and 21. A significant proportion (32.31%) of service users received less than ten individual sessions.
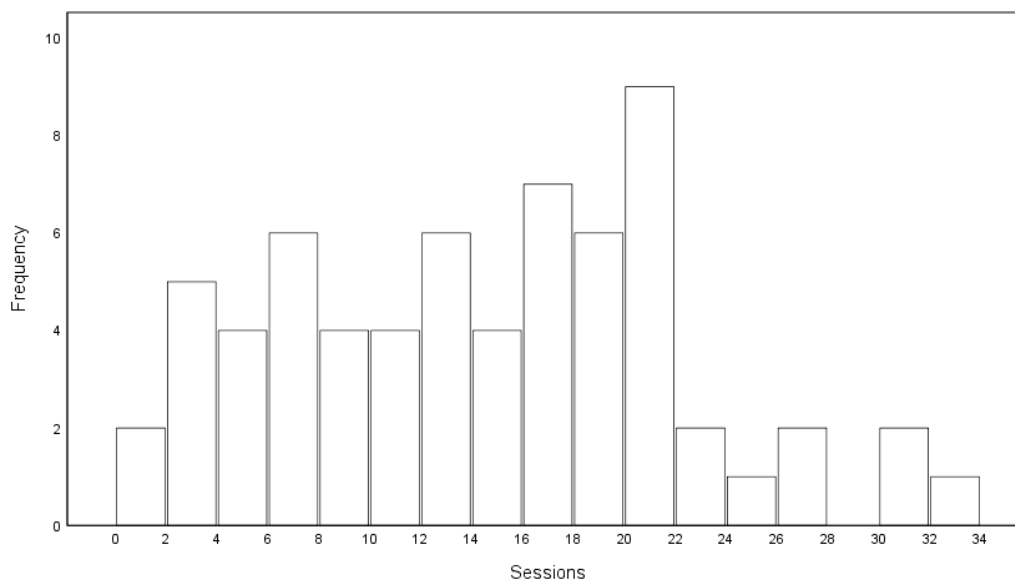

Figure 1. Distribution of treatment sessions

Descriptive statistics were obtained for ORS and SRS baseline scores (i.e. scores from their initial session), ORS and SRS final session scores, and ORS and SRS change scores. ORS and SRS change scores were obtained by subtracting the individual's baseline score from the scores obtained in their final session.

As Table 2 shows, the mean and median ORS baseline scores across the whole sample sit slightly above the clinical cut-off of 25, and the mean and median both increase by the final treatment session. The mean and median SRS baseline scores fall below the recommended cut-off of 36, however, both had increased in the final session. Although the mean SRS had not increased above the cut-off by the final session, the median had, indicating that the majority of the sample had scores above the recommended cut-off of 36. The mean and

median ORS and SRS change scores were both positive. See Section 3.3. for effect size

analyses.

Table 2

Descriptive Statistics for ORS Baseline, ORS Final, SRS Baseline, SRS Final, ORS Change, and SRS Change

	n	*M*	*SD*	*Median*	Minimum	Maximum
ORS Baseline	65	25.38	7.33	26.90	8.60	38.5
ORS Final	63	31.58	8.44	34.50	4.20	40
SRS Baseline	65	34.38	5.23	35.60	18.20	40
SRS Final	63	35.96	6.15	38.30	6.20	40
ORS Change	63	5.99	8.43	5.40	-17.30	23.40
SRS Change	63	1.62	6.04	1.30	-24.90	14.10

Descriptive statistics were next calculated for risk scores on the Static-99R, Stable-2007,

and the VRS:SO, both pre and post-treatment.

As Table 3 shows, the mean and median Static-99R and Stable-2007 scores both pre and

post-treatment indicate that on average, participants would be considered moderate risk;

according to published interpretive cut-offs (Hanson et al., 2007; Helmus et al., 2012). Based

on the combined scoring rules for risk on the Static-99R and Stable-2007 proposed by

Hanson et al. (2007), on average, this sample would be considered moderate-low risk at both

pre and post-treatment. The mean and median pre-treatment VRS-SO scores indicate that

participants are considered moderate-low risk, and the decrease in mean and median VRS-SO

scores post-treatment indicate participants would have been considered low risk at treatment

completion (Olver et al., 2007).

Table 3

Descriptive Statistics for Risk Scores Pre and Post Treatment on Static-99R, Stable-2007, and VRS-SO

	n	*M*	*SD*	*Median*	Minimum	Maximum
Static-99R Pre	32	2.69	2.07	3	-1	9
Static-99R Post	17	2.76	2.20	3	-1	9
Stable-2007 Pre	37	9.62	3.85	10	3	18
Stable-2007 Post	26	7.65	4.40	7	2	18
VRS-SO Pre	11	23.82	7.52	25	10	39
VRS-SO Post	4	15.63	6.42	16.50	7	23

Frequency distributions were obtained for reconvictions amongst the mandated service users, including frequency of reconvictions, frequency of subsequent convictions, and reconviction types.

As Table 4 shows, out of the 33 mandated service users, 30.3% ($n = 10$) were reconvicted. For the majority of these, only one subsequent conviction was recorded ($n = 6$, 18.2% of the mandated sample). 90 percent of the initial reconvictions recorded were for breaching sentence conditions, and breaches also represented 50% ($n = 2$) of the subsequent reconvictions. There were no cases of recorded sexual recidivism in the mandated sample.

Table 4

Frequency Table for Reconviction Data

	Frequency	Percent	Cumulative Percent
Reconviction Frequencies			
No Reconvictions	23	69.7	69.7
One Reconviction	6	18.2	87.9
Multiple Reconvictions	4	12.1	100
Total	33	100	
First Reconviction Type			
Sexual Offence	0	0	0
Property Offence	0	0	0
Drug-Related Offence	0	0	0
Breach of Sentence	9	90	90
Violent Offence	1	10	100
Total	10	100	
Subsequent Reconviction Type			
Sexual Offence	0	0	0
Violent Offence	0	0	0
Breach of Sentence	2	50	50
Property Offence	1	25	75
Drug-Related Offence	1	25	100
Total	4	100	

3.2. Trends over Treatment

Only a small proportion of service users making up the sample received more than 21 individual treatment sessions. According to Kelley, Clark, Brown, and Sitzia (2003), larger sample sizes give a better estimate of the population. Therefore, due to the frequency of session numbers higher than 21 only consisting of one or two individuals, the averages above 21 sessions were not taken. Therefore, ORS and SRS scores were plotted over the first 21

sessions to explore the trend of these scores over the number of treatment sessions the

majority of scores were obtained.

Figure 2 presents the trend of ORS totals across the sample obtained at each of the first 21

individual treatment sessions. As Figure 2 shows, ORS score averages gradually increased at

each of the first five sessions, and then stabilised from the sixth session onwards with

minimal variability. However, there was a noticeable decrease in the 21st session. The

median scores showed more variability, with gradual increases across the first seven sessions

and then showing various score increases and decreases across the remaining sessions, with a

noticeable drop in the 21st session. Across nearly all sessions the maximum score was 40,

however, minimum scores showed substantial variation with a cluster of very low scores in

the 19th, 20th, and 21st sessions. A number of outliers fell below the 25th percentile,
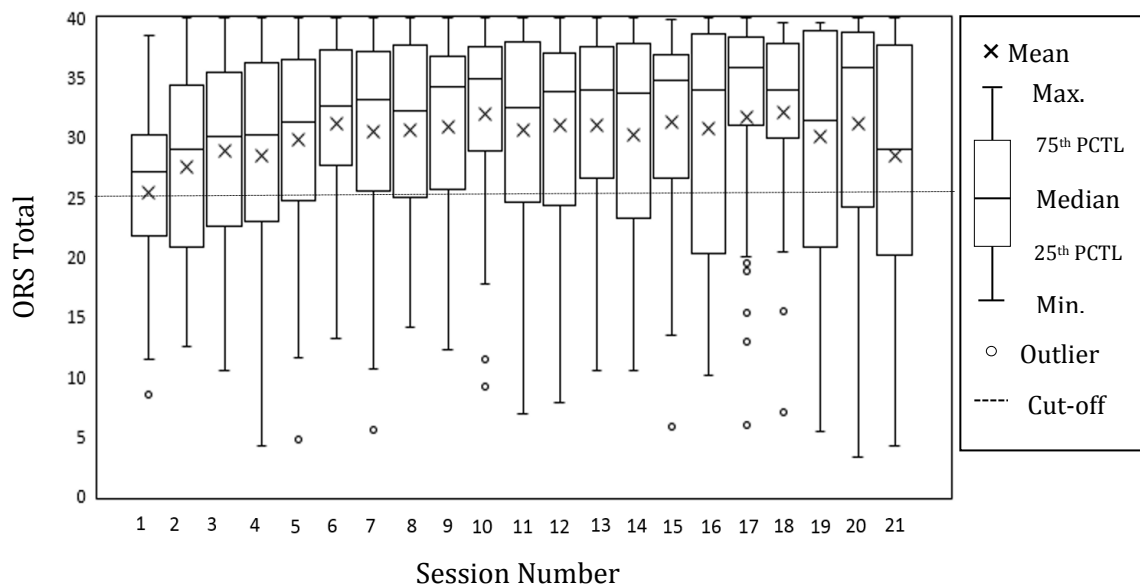
particularly in session 17.

Figure 2. ORS scores across the first 21 treatment sessions

Figure 3 presents the trend of SRS totals across the sample obtained at each of the first 21

individual treatment sessions. As Figure 3 shows, at the beginning of treatment, the mean and

median SRS score sat just below the recommended cut-off of 36, indicating the therapeutic

alliance would not be considered strong. From the third session onwards, mean SRS scores

increased slightly and sat near, or over the cut-off for the remaining number of treatment

sessions. After the first individual treatment session, median SRS scores sat above the

recommended cut-off of 36 for the remaining 20 sessions. A substantial number of outliers

fell below the 25th percentile in this sample.
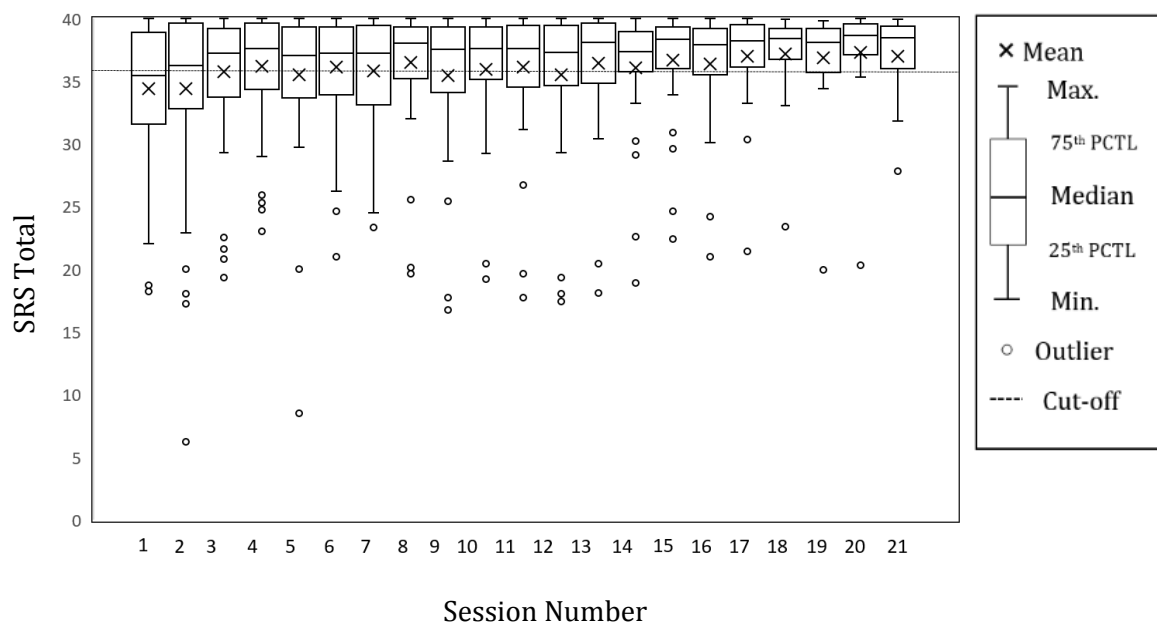
Figure 3. SRS scores across the first 21 treatment sessions

3.3. Pre-Treatment and Post-Treatment Comparison

ORS and SRS scores obtained at the beginning of treatment were compared to ORS and

SRS scores obtained in the final session for each individual in the sample. A Wilcoxon

Signed-Ranks test was used as the Shapiro Wilk test revealed the assumption of homogeneity

of variance was not met for ORS baseline scores ($W = .959$, $p = .03$), SRS baseline scores (W

$= .881$, $p = .00$), ORS final scores ($W = .860$, $p = .00$), or SRS final scores ($W = .652$, $p =$

.00).

The Wilcoxon Signed-Ranks test revealed post-treatment scores were significantly higher

for the ORS than pre-treatment scores (post-treatment M = 34.73, pre-treatment M = 22.43, Z = -4.751, p = .001). The effect size value (r = .60) suggests large practical significance (Pallant, 2007). For the SRS, post-treatment scores were also significantly higher than pre-treatment scores (post-treatment M = 32.76, pre-treatment M = 24.63, Z = -2.963, p = .003), with the effect size value (r = .37) suggesting moderate practical significance (Pallant, 2007).

3.4. Differences across Groups

To allow for the violation of assumption of homogeneity of variance in ORS and SRS baseline scores, a Mann-Whitney U test was used to compare the difference between mandated and non-mandated service users, on both ORS and SRS baseline scores.

The Mann-Whitney U test revealed no significant differences between mandated and non-mandated service users on ORS baseline scores (mandated M rank = 35.27, non-mandated M rank = 30.66, U = 453, Z = -.984, p = .33, d = .24). However, mandated service users had significantly higher SRS baseline scores than non-mandated service users (mandated M rank = 37.71, non-mandated M rank = 28.14, U = 372.50, Z = -2.04, p = .04, d = .52). Cohen's effect size value suggests moderate practical significance.

Two of the 65 service users were not included in further analyses, as they did not attend more than one session meaning change scores were not obtained. One of these two service users were mandated, therefore, they were also excluded from the recidivism analysis. The assumption of homogeneity of variance was met for ORS change scores (W = .984, p = .56). Therefore, independent samples t-tests were used to compare differences between referral type and change in ORS scores, differences in attrition and ORS change scores, and differences between offence type and ORS change scores.

Table 5 presents the independent sample t-tests for ORS change scores and the grouping variables. As Table 5 shows, there were no significant differences in ORS change scores

between mandated and non-mandated clients, those with contact versus non-contact offences,

nor mandated clients with new convictions and those without. However, there was a

significant difference between treatment completers and non-completers, with completers

more likely to have higher ORS change scores than those who did not complete treatment.

The Cohen's effect size value of $d = .70$ suggests moderate practical significance, and on

average, ORS scores decreased for those who did not complete treatment.

Table 5

Independent Sample T-tests for Difference in ORS Change scores Between Groups Based on Attrition, Offence Type, Referral Type, and Recidivism

Grouping Variable		M	SD	n	df	t	p	d
Attrition	Completers	6.06	8.15	38	41	2.28	.03*	.70
	Non-completers	-2.68	7.46	5				
Referral Type	Mandated	7.99	6.13	32	61	1.957	.06	.49
	Non-Mandated	3.92	9.98	31				
Offence Type	Contact	5.48	8.75	44	60	.692	.49	.19
	Non-Contact	7.14	7.89	18				
Recidivism	New Offence	6.04	3.35	9	30	1.129	.26	.50
	No New Offence	8.75	6.38	23				

*p is significant at the .05 level (two-tailed)

The assumption of homogeneity variance was not met for SRS change scores ($W = .899$, $p = .00$). Therefore, Mann-Whitney U tests were used to compare differences between SRS

change scores and referral type, attrition, offence type, and those with new convictions and

those without.

Table 6 presents the Mann-Whitney U test statistics analysing differences in SRS scores

over treatment for each of the grouping variables. As Table 6 shows, there were no

significant differences in SRS change scores between mandated and non-mandated clients, those with contact versus non-contact offences, nor those with a new conviction and those without. However, there was a significant difference between treatment completers and non-completers, with completers more likely to have had a greater improvement in SRS scores over treatment than those who did not complete treatment. The Cohen's effect size value of d = .71 suggests high practical significance.

Table 6

Mann-Whitney U Tests for Differences in SRS Change Scores Between Groups Based On Attrition, Offence Type, Referral Type, and Recidivism

Grouping Variable		M (rank)	n	U	Z	p	d
Attrition	Completers	23.53	38	37.00	-2.198	.02*	.71
	Non-completers	10.4	5				
Referral Type	Mandated	29.89	32	428.500	-.928	.35	.23
	Non-Mandated	34.18	31				
Offence Type	Contact	30.61	44	357.00	-.605	.54	.15
	Non-Contact	33.67	18				
Recidivism	New Offence	14.28	9	83.50	-.839	.40	.30
	No New Offence	17.37	23				

*p is significant at the .05 level (two-tailed)

A one-way ANOVA was used to compare differences in ORS change scores and combined risk level, and differences in ORS change scores and cooperation with supervision. Results can be seen in Table 7.

As can be seen, there were no significant differences in ORS change scores for the combined risk groups. However, there was a significant difference in ORS change scores

between cooperation with supervision groups. The partial eta squared value of $\eta^2 = .22$

suggests high practical significance.

Table 7

One-Way ANOVAs for Differences in ORS Change Scores Between Combined Risk Categories, and Cooperation with Supervision Groups

Grouping Variable		Sum Of Squares	df	Mean Square	F	p	η^2
Combined Risk	Between	206.732	4	51.683	.691	.60	.09
	Within	2093.830	28	74.780			
	Total	2300.562	32				
Cooperation With Supervision	Between	583.088	2	291.544	5.027	.01*	.22
	Within	2087.635	36	57.990			
	Total	2670.723	38				

*p is significant at the .05 level (two-tailed)

A post hoc Tukey test revealed significantly higher change in ORS scores over treatment in the cooperative group ($M = 8.33$, $SD = 8.50$) compared with the non-cooperative group ($M = -4.50$, $SD = 8.65$) ($p = .01$). There was also significantly higher change in ORS scores over treatment in the moderately cooperative group ($M = 8.03$, $SD = 4.48$) compared with the non-cooperative group ($M = -4.50$, $SD = 8.65$) ($p = .02$). No significant differences were found between the cooperative group ($M = 8.33$, $SD = 8.50$) and moderately cooperative group ($M = 8.03$, $SD = 4.48$) ($p = .99$).

To allow for the violated assumption of variance in SRS change scores, Kruskal-Wallis tests were used to compare differences in SRS change scores between groups based on cooperation with supervision and groups based on combined risk level.

As Table 8 shows, there were no significant group differences on SRS change scores across these groups.

Table 8

Kruskal-Wallis Tests for Differences in SRS Change Scores and Combined Risk, and Cooperation with Supervision

Grouping Variable		M (Rank)	χ^2	*df*	*p*	η^2
Combined Risk	Low	19.83	.649	4	.96	.10
	Low-Moderate	16.62				
	Moderate-High	16.25				
	High	16				
	Very High	16				
Cooperation With Supervision	Cooperative	19.81	.193	2	.91	.05
	Moderate Issue	21.05				
	Uncooperative	18.25				

*p is significant at the .05 level (two-tailed)

3.5. ORS and SRS Score Correlations

A Pearson Correlation Coefficient matrix was produced for relationships between ORS and SRS scores and risk scores on the Static-99R and Stable-2007 measured at pre and post-treatment, combined static and dynamic risk, and age.

As Table 9 indicates, a significant negative correlation was obtained between ORS baseline scores and pre-treatment risk measured using the Stable-2007. Significant negative correlations were also obtained between ORS baseline scores and risk measured using the VRS:SO at both pre and post treatment. ORS scores collected in the final treatment session had significant negative correlations with dynamic risk as measured using the Stable-2007 at pre and post treatment, as well as risk at pre-treatment measured using the VRS:SO.

SRS scores collected in the final treatment session as well as the change in SRS scores from pre-treatment to post-treatment were significantly correlated with dynamic risk assessed at post-treatment using the Stable-2007. SRS scores obtained at baseline had no significant correlation with risk on any of the risk measures, nor were there any significant correlations between the risk measures and the change in ORS scores from pre-treatment to post-treatment. Combined static and dynamic risk scores did not correlate with any of the ORS and SRS scores, and age did not correlate with any variable.

Table 9
Correlation Matrix for Age, ORS and SRS Totals, and Risk Measures Pre and Post-Treatment

	ORS Baseline	ORS Final	ORS Change	SRS Baseline	SRS Final	SRS Change	Static-99R Pre	Static-99R Post	Stable-2007 Pre	Stable-2007 Post	VRS:SO Pre	VRS:SO Post	Age	Combined Risk
ORS Baseline	1	.432**	-.432**	.235	.194	-.024	.109	.095	-.386*	-.374	-.618*	-.982*	.004	-.037
ORS Final		1	.627**	.351**	.527	.228	.108	.164	-.341*	-.587**	-.772**	-.595	.074	-.252
ORS Change			1	.133	.360**	.249*	.022	.126	-0.61	-.367	-.488	-.246	.051	-.223
SRS Baseline				1	.451**	-.419**	.011	.104	.109	-.093	-.336	-.765	.144	-.039
SRS Final					1	.621**	-.013	-.069	-.220	-.571**	-.147	-.686	.155	-.203
SRS Change						1	-.020	-.144	-.282	-.515**	.329	.729	.037	-.179
Static-99R Pre							1	1.00**	.254	.171	-.126	.982	-.160	.782**
Static-99R Post								1	.331	.245	.106	1.00**	.114	.703**
Stable-2007 Pre									1	.761**	.183	1.00**	.133	.608**
Stable-2007 Post										1	.813	.047	.103	.645**
VRS:SO Pre											1	.995**	-.267	.190
VRS:SO Post												1	-.899	.990
Age													1	.013
Combined Risk														1

* Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed)
Note. The combined risk variable was analysed using a Spearman's Rank Correlation Coefficient

Discussion

The aim of this study was to explore the utility of the ORS and SRS in a sexual offending treatment context using a quantitative analysis. 65 clients participating in the STOP community treatment programme between the years 2013 and 2017 formed the sample for this study. All participants completed the ORS at the beginning of individual treatment sessions, and the SRS at the conclusion of individual treatment sessions. The results showed, on average, clients in their first individual treatment session had ORS scores sitting above the clinical cut-off of 25 that Miller and Bargmann (2012) determined differentiates a clinical and non-clinical population. On average, individuals at the end of their first individual treatment session had SRS scores falling just below the score of 36 that Miller and Bargmann (2012) suggested shows a strong therapeutic alliance. Further analyses showed as treatment progressed, scores on both scales significantly increased. At the conclusion of treatment, the average SRS score had not increased above the cut-off indicating a strong therapeutic alliance, however, the median had, which indicates the majority of service users rated the therapeutic alliance as strong. There were no differences in ORS scores obtained at baseline between mandated and non-mandated service users, however, mandated service users had significantly higher SRS scores at baseline than non-mandated service users. There were no between-group differences in change scores on either scale for combined risk category, offence type, referral type, or those with new convictions and those without. However, service users who did not complete treatment showed significantly less improvement in ORS scores between their first and final individual sessions than service users who completed treatment. Furthermore, clients scored as non-cooperative also had significantly less improvement in ORS scores between their first and final individual sessions than clients who were scored as cooperative, or scored as having a moderate issue with cooperation. Significant negative correlations were found between risk measured on the Stable-2007 at

pre-treatment and ORS baseline scores (i.e. higher pre-treatment dynamic risk correlated with lower baseline functioning), risk measured on the Stable-2007 at pre and post-treatment and final ORS scores (i.e. higher pre and post-treatment dynamic risk correlated with lower functioning at final session), and risk measured on the Stable-2007 at post-treatment and final SRS scores (i.e. higher post-treatment dynamic risk correlated with weaker therapeutic alliance). Finally, risk measured on the Stable-2007 at post-treatment also had a significant negative correlation with SRS change scores (i.e. higher post-treatment dynamic risk correlated with less improvement in therapeutic alliance).

Consistent with the research hypothesis, ORS scores significantly increased over treatment. The trend of mean ORS scores had minimal variation across the 21 treatment sessions analysed, with the biggest increase occurring throughout the first five sessions. The trend of median ORS scores showed the most noticeable increase over the first seven sessions, with more variation across treatment than mean scores. While there was a decrease in mean and median scores towards the 21st session, it is important to consider the average score for the final session was reflected differently than the scores in the box plot, as not every service user received 21 individual sessions. Furthermore, while the majority of individuals scored near, or above the clinical cut-off, a number of individuals had very low scores in the 25th percentile, particularly in the later sessions. It is possible these individuals remained in treatment longer as they had more treatment needs, which could have been reflected in their very low ORS scores. Nevertheless, the significant improvement over treatment supports the proposition by Miller and Bargmann (2012) that regardless of ORS scores obtained at treatment intake, as treatment progresses, ORS scores should increase. Furthermore, it is consistent with the finding by Prescott and Miller (2014) that treatment in a sexual offending context has the ability to improve individual, interpersonal, social, and overall well-being. With this result indicating an improvement in client well-being, the

efficacy of implementing the GLM-C in sexual offending treatment to improve well-being and quality of life is supported. The considerable focus of a strengths-based model within this treatment programme might explain the significant improvement in ORS scores obtained in the final treatment session compared to baseline.

The improvement of ORS scores over the course of treatment could also be explained by the presence of negative affect and various social and intimacy deficits experienced by a proportion of service users. Several etiological theories of sexual offending attribute sexually harmful behaviour to the presence of these deficits, such as poor socialisation, poor relationships and social skills, and the inability to regulate emotions (e.g. Hall & Hirschman, 1991; Marshall & Barbaree, 1990; Ward & Beech, 2005; Ward & Siegert, 2002). Therefore, treatment addressing sexually harmful behaviour may improve these factors that could have played a causal role in the offending. However, it is important to consider the diverse range of individuals in this population (Blasko, 2016), and therefore other factors not outlined in the etiological theories may well also be underlying this change.

The improvement in ORS scores may also be contributed to by factors not related to this sample, such as the effect of time. It is feasible that this sample may have improved without receiving treatment, and without a control group, it is not possible to evaluate this. Furthermore, it is important to note the average ORS score at baseline did not fall below the clinical cut-off of 25. Therefore, it may not be valid to claim treatment in this context was able to improve poor well-being, because the average ORS score at baseline did not suggest this population was experiencing clinically low functioning. Nevertheless, it is noteworthy that these scores increased significantly over the course of treatment regardless of baseline scores, and it can be taken as support for the efficacy of a strengths-based model in sexual offending treatment having the ability to improve individual, interpersonal, social, and overall functioning.

The finding that SRS scores significantly increased over treatment also supports the research hypothesis. The trend of SRS scores across the 21 treatment sessions analysed showed minimal variation, with the most substantial increase occurring at the third session for both mean and median scores. While both mean and median scores sat near, or above the cut-off of 36 for the remaining treatment sessions, there were a substantial amount of outliers falling below the 25th percentile. This suggests that while the majority of the sample rated the therapeutic alliance as strong, there were some cases that rated very low, even in later sessions. Therefore, the substantial number of outliers may explain why the mean score remained below 36 in the final session, as Cousineau and Chartier (2010) suggested the mean is more susceptible to the presence of outliers. Nevertheless, the significant increase is consistent with the proposition by Miller and Bargmann (2012) that SRS scores should either remain high throughout treatment, or improve. While the significant improvement did not increase mean SRS scores in the final session to a level above the cut-off that Miller and Bargmann (2012) suggested shows a strong therapeutic alliance, the final median score did increase above the cut-off. This result indicates that while there were a substantial amount of service users rating very low on the SRS as indicated by the outliers, the therapeutic alliance improved across treatment for the majority of service users, meaning the underlying goal of implementing the SRS was achieved.

The service users that did score very low on the SRS could be attributed to the presence of distorted cognitive appraisals outlined in Hall and Hirschman's (1991) Quadripartite model. Distorted cognitive appraisals may lead service users to believe they do not need treatment, as these appraisals lead individuals to believe that their sexually harmful behaviour was reciprocated (Hall & Hirschman, 1991). More recently, a meta-analysis found distorted cognitions around sexual offending were associated with greater levels of denial and minimisation, with cognitive distortions leading the individual to deny the need for treatment

(Nunes & Jung, 2013). Therefore, it is possible the service users scoring very low on the SRS believed their sexual behaviour did not need intervention, with potential hostility about receiving unnecessary treatment being reflected in their SRS scores falling below the 25th percentile. Furthermore, the individuals scoring below the 25th percentile could have experienced the inability to form relationships proposed in Marshall and Barbaree's (1990) Integrated Theory. The Integrated Theory suggests individuals engaging in harmful sexual behaviour often experience poor attachment styles in childhood, leading to the inability to form trusting relationships with others (Marshall & Barbaree, 1990). Therefore, the potential social deficits experienced by service users scoring below the 25th percentile may explain why they rated the therapeutic alliance as poor. However, it is important to consider that factors highlighted by these theories may only apply to a proportion of individuals scoring below the 25th percentile, and the diversity of individuals who engage in sexually problematic behaviour indicates there may be other unknown factors underlying these low scores.

Nevertheless, it is important to note there was a significant improvement over treatment. This improvement suggests that issues in the therapeutic alliance could be addressed and modified, therefore leading the service user to rate the clinician and their methods more highly as treatment progressed. Furthermore, this significant increase also highlights the ability to improve the therapeutic alliance in a sexual offending treatment context, which is consistent with the finding by Prescott and Miller (2014).

The finding of the average ORS score obtained at baseline sitting above the score of 25 that differentiates a clinical and non-clinical population does not support the research hypothesis. Miller and Bargmann (2012) suggested in nearly one-third of cases, individuals enter into treatment with ORS scores above the clinical cut-off, and the most common reason for this is the fact some individuals receive mandated treatment. However, further analyses revealed no difference in ORS baseline scores between the mandated and non-mandated

service users. Miller and Bargmann (2012) suggested alternate explanations for high ORS scores at treatment intake could be attributed to the service user seeking help for a very specific problem. Therefore, their quality of life outside of this problem may not be impacted, resulting in an ORS score above the clinical cut-off. However, this explanation should be taken with caution in this context, as all etiological models of sexual offending outlined suggested harmful sexual behaviour emerges from deficits in one or more areas of the individual's life (Finkhelhor, 1986; Hall & Hirschman, 1991; Marshall & Barbaree, 1990; Ward & Beech, 2005; Ward & Siegert, 2002). Furthermore, the Good Lives Model-Comprehensive (GLM-C) suggests sexual offending can occur due to flaws in an individual's good life plan (Ward & Gannon. 2006). Therefore, it would be expected that those with a flaw in their good life plan would also have low levels of personal, interpersonal, social, and overall functioning as measured by the ORS. Perhaps these high ORS scores reflect the fact this treatment service is community-based, meaning service users have higher levels of functioning than those imprisoned for sexual offending. Therefore, to obtain a deeper understanding of the utility of these scales in a sexual offending population, future research should investigate the utility of the ORS in a prison context.

The result of treatment completers having a significantly greater improvement in ORS scores than those who did not complete treatment is noteworthy, due to Lambie and Stewart (2012) noting that individuals who drop out of sexual offending treatment have higher rates of recidivism than individuals who complete treatment. This suggests those not showing improvement in ORS scores as treatment progresses may be more likely to terminate treatment, and this could alert the clinician to adapt treatment in a manner that is more suitable and motivating for the individual. Preventing treatment termination may, in turn, prevent recidivism. However, it is important to note that only a small proportion of the sample did not complete treatment. A larger sample would increase the statistical power

behind this finding (Suresh & Chandrashekara, 2012). Furthermore, the greater increase in

ORS scores amongst treatment completers could be attributed to the fact they spent more

time in treatment, therefore, having more opportunity to improve. Also, a third factor

impacting well-being could have caused these individuals to terminate treatment early,

meaning their ORS scores did not show as much improvement. Nevertheless, this finding is

noteworthy as it may help clinicians detect clients likely to drop out early, enabling them to

address potential issues with the service user and their well-being before a negative treatment

outcome occurs.

   Inconsistent with the suggestion by Fernandez et al. (2014) that the cooperation with

supervision item on the Stable-2007 is related to the therapeutic alliance, no significant

differences were found between SRS change scores and the levels of cooperation with

supervision in this research. Perhaps the small sample size in this study obscured this finding,

and future research with a larger sample size could investigate this relationship further.

However, individuals rated as cooperative with supervision had significantly greater

improvements in ORS scores compared to those rated as non-cooperative, or those rated as

having a moderate issue. Although no evidence has been found in the FIT literature that

contradicts this result, it is noteworthy as it suggests those who were rated as being

cooperative with supervision made significantly greater improvements in personal,

interpersonal, social, and overall well-being. Perhaps this finding is a marker for a

responsivity issue, with those rated as less cooperative not responding to treatment in a way

that improves their personal, interpersonal, social, and overall well-being as much as those

who were scored as cooperative with supervision. Furthermore, it is important to note that

only a small proportion of service users in this sample were considered non-cooperative or

considered having a moderate issue with supervision. Therefore, the statistical power behind

this finding is weakened, and a larger sample size would add greater power to this result

(Suresh & Chandrashekara, 2012).

Interestingly, mandated service users had significantly higher SRS baseline scores than non-mandated service users. Although no evidence has been found in the literature that contradicts this finding, this result is noteworthy as Witkiewitz (2011) suggested individuals in sexual offending treatment might respond to tasks in a way that they believe adheres to the requirements of therapy. Therefore, mandated individuals in this setting may complete the SRS in a way they believe shows treatment engagement, because engaging in intervention is a condition of their sentence. However, it is important to note there were no significant differences between mandated and non-mandated service users on their change scores on either scale. Perhaps, consistent with the recommendation by Miller and Bargmann (2012), the clinicians in this setting created an environment where service users felt they could comfortably provide feedback, and as treatment progressed, mandated service users felt they could rate the clinician more honestly. However, the diversity of this population means there could be several factors underlying this finding.

The significant negative correlation between ORS scores obtained at baseline and Stable-2007 scores obtained at pre-treatment indicates those who rate higher on the ORS (i.e. higher personal, interpersonal, social, and overall functioning) have lower risk scores measured by the Stable-2007. This finding is noteworthy, as change in dynamic risk is one of the major indicators of treatment outcome in this population due to risk scores being used to predict recidivism (Hanson et al., 2015). This negative correlation provides useful information as to whether the ORS has utility in a sexual offending context, because the relationship it has with setting specific tools such as the Stable-2007 suggests the information collected from the ORS is meaningful and relevant. Perhaps the ORS adheres to the RNR principles by monitoring needs that are non-criminogenic. Although the risk principle highlights the importance of targeting criminogenic needs in treatment (Andrews & Bonta, 2017), by

improving factors that make an individual more accepting and able to complete treatment, such as well-being, this would adhere to the responsivity principle. Adherence to the RNR principles, in turn, should result in more beneficial treatment outcomes in the form of reduced dynamic risk and recidivism. It is important to consider though, that correlation does not imply causation, meaning this finding only implies some form of relationship exists. An unknown third variable such as living environment, income, or employment status could be confounding this relationship, and due to the heterogeneity of those who engage in harmful sexual behaviour (Blasko, 2016), this is highly plausible. Furthermore, the ORS and Stable-2007 may be measuring similar variables (though in opposing directions), as both scales measure aspects of social and interpersonal functioning. Therefore, the negative relationship could be a product of the similarities of the factors being measured, and not a true relationship between well-being and risk. Nevertheless, this finding is noteworthy, due to individuals rated as higher risk reporting lower levels of individual, interpersonal, and social functioning. This may also have implications for the utility of implementing a model that focuses on a strengths-based approach in a sexual offending treatment context, and future research exploring the possible causal directions of this relationship would be useful.

The significant negative correlation between final ORS scores and risk measured on the Stable-2007 at pre and post-treatment is also noteworthy, as this indicates those initially presenting as lower risk complete treatment with higher ORS scores. Furthermore, this also indicates those with higher ORS scores at the end of treatment have lower post-treatment risk scores. These findings are interesting due to risk measurement tools being used to predict the likelihood of recidivism. Therefore, the relationship the ORS has with setting specific tools suggests the utility of the ORS in this context may provide the clinician with useful information. However, this result should be taken with caution, as correlation does not imply causation, and an unknown third variable could be causing this relationship. Furthermore, it

is important to note that scores on the ORS should not be used for any form of risk prediction, as the ORS is only designed as a brief measure of well-being. Nevertheless, this finding may have implications on whether it is useful for clinicians to continue to use this scale throughout treatment for sexual offending, as this relationship suggests collecting information on well-being is relevant in this context.

The finding that Stable-2007 scores measured at post-treatment and final SRS scores negatively correlated suggests those who score higher on the SRS in their final treatment session have lower post-treatment dynamic risk scores. Furthermore, the negative correlation between Stable-2007 scores measured at post-treatment and SRS change scores suggests those who have higher rates of improvement on the SRS are more likely to obtain a lower risk score once treatment is completed. The negative correlation between post-treatment Stable-2007 scores and final SRS scores is noteworthy, due to the finding by Duncan et al. (2003) that a strong therapeutic alliance is one of the biggest predictors of treatment effectiveness. Although Duncan et al. (2003) made this claim in relation to a clinical setting, reducing risk and recidivism is one of the main goals in a sexual offending treatment context (Stinson et al., 2017). Therefore, this relationship indicates a possibility of the SRS being extended to successful outcomes in sexual offending treatment, and future research with a larger sample could explore this further by controlling for potential confounding variables such as relationship status, living environment, and income using regression analyses.

Furthermore, the negative correlation between post-treatment Stable-2007 scores and SRS change scores is consistent with the proposition by Miller and Bargmann (2012) that it is not the initial SRS score that has implications on treatment outcome, but rather the ability to improve SRS scores that has been linked to treatment effectiveness. However, correlation does not imply causation, and this finding only indicates that improving SRS scores over treatment is linked with lower dynamic risk scores, and is therefore potentially beneficial.

Interestingly, no differences were found between ORS and SRS change scores and those with new convictions and those without. This finding suggests those with new convictions and those without showed no difference on how their scores improved on both scales as treatment progressed, which provides further information regarding how these scores relate to setting specific outcomes. However, this finding should be taken with caution, as the majority of reconvictions incurred by individuals in this sample were for breaching sentence conditions, and there were no cases of sexual recidivism. Therefore, it was not possible to investigate the relationships these scores have with sexual recidivism, and while Lambie and Stewart (2012) found low rates of sexual reoffending in their community sample, future research with a larger sample and a longer follow-up period may be able to explore potential links between recidivism and ORS and SRS scores further. Moreover, reconviction data was only collected on the mandated service users making up 50.8% of the current sample, meaning the recidivism information was not completely representative. This is a limiting factor in relation to what implications should be taken from this result, and therefore should only be used to provide scope for future research in this context. It is also important to acknowledge the varied follow up times in this sample, with some cases (9.23%) having a follow up period of less than one year. This also limits the extent to which generalised implications should be drawn from this finding, and research with a prolonged follow up period should be employed to address this. Furthermore, this research only obtained information on the occurrence or otherwise of breached sentence conditions, meaning the exact nature of the sentence breaches were unable to be explored. Therefore, comparisons amongst different reconviction types were not made, because of the likelihood that the very small number of individuals with identifiable reconvictions would have produced a type I error, meaning the null hypothesis would have been falsely rejected (Banerjee, Chitnis, Jadhav, Bhawalkar, & Chaudhury, 2009). Nevertheless, this finding provides scope for future

research, and contributes a preliminary understanding on what the scores on these scales tell us about individuals receiving treatment for sexual offending.

There were also no differences between mandated and non-mandated clients on their change scores on either the ORS and SRS. This finding suggests both mandated and non-mandated service users have the same ability to improve their functioning across individual, interpersonal, and social domains over treatment, as well as the same likelihood that they will perceive the therapeutic alliance as being enhanced. Although no current evidence exists in the literature that is inconsistent with this finding, this is noteworthy as Miller and Bargmann (2012) suggested individuals receiving mandated treatment may score more highly on the ORS than those not receiving authoritatively ordered treatment. This may have extended to differences in treatment progression on the ORS, as well as differences in the development of a therapeutic relationship. It is possible that the small sample size of this study resulted in the lack of differences, and therefore future research with a larger sample could explore differences between mandated and non-mandated service users further.

Furthermore, there were no group differences between ORS and SRS change scores across the different levels of the combined risk category variable. This finding is interesting, given that in the current study significant relationships were found between dynamic risk and both ORS and SRS scores. However, it is important to note the combined risk category also took into account scores on the Static-99R, and risk scores on this scale had no relationship with either ORS or SRS scores. This could be explained by the likelihood that the variables measured by the Static-99R, such as offence history and age, are not linked to well-being or therapeutic relationship. Therefore, this finding reflects the likelihood that a relationship only exists between factors that are changeable in treatment, such as criminogenic and non-criminogenic needs.

No differences were found between ORS and SRS change scores and offence type. This

suggests that regardless of whether individuals in this service had engaged in a contact offence or not (i.e. if their offending that brought them into treatment was online, or similar), they have the same likelihood of improving on both scales over treatment. Although differences between offence typology specific to the ORS and SRS do not appear to have been investigated in the literature, any differences between individuals in this setting are noteworthy.

Finally, there were no significant correlations between ORS and SRS scores and VRS:SO scores at either pre-treatment or post-treatment. Although there were significant negative correlations between ORS and SRS scores and Stable-2007 scores, this could be explained by the fact the VRS:SO also incorporates static risk factors, and there were no correlations between Static-99R scores and ORS and SRS scores. Perhaps static risk factors such as age at first offence and offending history have no relationship with client well-being and therapeutic alliance. As noted earlier, it is feasible the relationship between the ORS and SRS and dynamic risk scores reflect a correlation between criminogenic and non-criminogenic needs. Therefore, a risk tool that also measures unchanging static risk factors might not correlate with scales measuring needs that could enhance treatment engagement. Moreover, it is possible the relationship between ORS and SRS scores and the VRS:SO was weakened due to the VRS:SO only being implemented partway through data collection. Therefore, the fact that only a small number of service users were measured on the VRS:SO could have obscured this relationship, and future research should implement this risk measure with a bigger sample.

4.1. Limitations and Future Research

This study had several limitations. Firstly, this study utilised a small sample from a community-based treatment programme with no control group. Findings with a small sample size should be taken with caution, due to the decreased statistical power increasing the

probability of a type II error, meaning the null hypothesis was not rejected when it should

have been (Banerjee et al., 2009). Furthermore, without a control group it is not possible to

control for the effect of time on score changes on the ORS. To address these limitations,

future research in this area should investigate the utility of the ORS and SRS in a larger

sample with a control group for ORS and SRS scores. The control group could consist of

individuals convicted of a sexual offence who had not yet received treatment. Furthermore,

individuals receiving treatment in this research were community-based, and therefore the

applicability of these findings to individuals receiving prison-based treatment is unclear.

Future research could explore differences between a community-based sample, a prison-

based sample, and some form of treatment control to make the research of the utility of the

ORS and SRS more applicable to a population with a history of sexual offending.

Secondly, the dataset used in this study had a significant amount of missing information,

such as data on pre and post-treatment risk scores, attrition, and ORS and SRS scores in some

sessions. A certain level of missing data may be inevitable when it comes to real world

research settings, particularly when data is collected retrospectively. Changes in clinicians

over the course of data collection, as well as challenges faced in real world settings can, in

part, explain this missing data. Challenges faced in real world research may include time

restrictions and human error. Time restrictions may mean data was not collected in certain

treatment sessions, and human error may have resulted in incorrect entry of the data.

Other missing data also resulted from information that was unable to be located at the time of

data collection, such as information regarding treatment attrition, risk scores at either pre-

treatment or post-treatment, or how the service users cooperated with supervision. Due to the

real world and retrospective nature of this research, missing data is mostly unpreventable.

Furthermore, it is important to acknowledge the implications behind the longitudinal

nature of the data collection. The ever-evolving nature of sexual offending treatment means

new research is continuously emerging (Blasko, 2016). Therefore, treatment models are continuously being updated to adhere to evidence-based practice, which may result in differential treatment for service users in this programme at an earlier stage. It is also important to acknowledge that service users received substantially varied numbers of individual treatment sessions. This made patterns of scores on the ORS and SRS more difficult to interpret over the whole sample, because the very low number of service users receiving more than 21 individual treatment sessions restricted the way the data could be analysed. However, this limitation was unavoidable in this context, as service users received individual sessions based on their treatment needs, which adheres to the RNR principles. The differential treatment of service users throughout data collection also applies to the implementation of the VRS:SO, as it only began to be utilised partway through data collection. Therefore, the relationships this scale had with ORS and SRS scores may be obscured, due to the small number of service users having their risk measured on this scale. Ideally, individuals would have received the same risk measurement across the period of data collection, however, the variation was unavoidable in this context. Furthermore, due to the VRS:SO being designed to measure change in risk across treatment (Olver et al., 2007), the small number of service users measured with the VRS:SO also limited the ability to explore the relationships between risk change and ORS and SRS scores. Future research could address these limitations by collecting scores on the ORS and SRS prospectively over a similar length of time, meaning the entire sample would be measured for risk using the VRS:SO. Addressing these limitations would make interpretation of ORS and SRS scores and their relationships with risk tools clearer and easier to infer.

Another limitation present in this research is the restricted data on recidivism. The fact the treatment programme also treated non-mandated individuals meant a significant proportion of service users were not known to the criminal justice system. Therefore, to protect the

identities of the service users without mandated referrals, information regarding their convictions at follow-up was not obtained. The substantial proportion of missing reconviction data meant a rigorous analysis of scores on the ORS and SRS and how they relate to recidivism could not be undertaken. Furthermore, the recidivism data that was obtained for the mandated sub-sample only revealed the presence of sentence breaches, and not the behaviours underlying them. This meant the specific nature of the reconvictions and how these may have related to ORS and SRS scores could not be investigated. This limits the implications that should be drawn from these current preliminary findings, but does highlight further scope for future research in this area.

Finally, the current findings were not able to determine cause and effect. The relationships between risk scores and ORS and SRS scores were investigated with correlation coefficients, and it is important to acknowledge that correlation does not imply causation. Therefore, these findings should be taken with caution, because the specific nature of the relationships found between risk and ORS and SRS scores cannot be determined. The presence of extraneous variables could have obscured these relationships, and the real world nature of this research meant potential third variables could not be controlled for. Future research could address this limitation by collecting information on potential confounding variables, such as living environment, employment status, and relationship status and controlling for them using regression analyses.

However, the real world and retrospective nature of this research suggests these findings have strong external validity for community-based treatment, and outcomes such as post-treatment risk and recidivism could be assessed. Furthermore, the presence of both mandated and non-mandated service users allowed ORS and SRS score comparisons amongst these groups, which adds valuable information to the literature on these scales.

4.2. Theoretical and Practical Implications

The significant improvement of ORS and SRS scores in a sexual offending treatment context suggests the GLM-C is being utilised effectively in this setting. The GLM-C suggests those who sexually offend are engaging in this behaviour to pursue their desired primary goods. Therefore, by improving their individual, interpersonal, social, and overall well-being, the individual may be more receptive of learning pro-social ways to pursue these goods. Furthermore, by having a strong therapeutic relationship with the clinician, the individual may be more motivated to work with them to identify goods they want to pursue, and what appropriate methods they could use to obtain them.

The implementation of the ORS and SRS in a sexual offending treatment context also adheres to the RNR principles. According to Andrews and Bonta (2017), for treatment to be effective for any type of offending, it should follow these principles. By measuring therapeutic alliance across treatment, this allows the clinician to tailor treatment based on individual needs, which adheres to the responsivity principle. Furthermore, although the risk principle does not highlight the necessity to target non-criminogenic needs, by monitoring ORS scores, non-criminogenic needs may also be addressed. By targeting non-criminogenic needs, the individual might be more motivated to complete treatment, which also means the responsivity principle is adhered to. This should produce favourable treatment outcomes, which, in this context, should be reflected in lower dynamic risk scores and reduced recidivism.

The significant improvement of ORS and SRS scores is also informative to clinicians, as it suggests treatment for sexual offending has the ability to improve client well-being and the therapeutic relationship. This could help clinicians identify those who are not improving as treatment progresses, therefore, allowing them to adapt treatment to suit the individual before

a negative or null outcome occurs. Preventing negative treatment outcomes should, in turn, minimise harm to the community.

4.3. Concluding Summary

In conclusion, this study investigated the utility of the ORS and SRS in a sexual offending treatment context. The utility of these scales in this population revealed that as treatment progresses, scores on both scales significantly increased. The improvement of scores over treatment supports the proposition by Miller and Bargmann (2012) that regardless of scores at baseline, ORS and SRS scores should increase throughout treatment. Due to the improvement across personal, interpersonal, social, and overall well-being, these findings suggest the GLM-C is being utilised effectively in this setting. Furthermore, monitoring potential non-criminogenic needs and collecting feedback that allows the clinician to tailor treatment to suit the individual adheres to the responsivity principle, which, in turn, should produce favourable treatment outcomes. Future research should investigate the utility of these scales in a prison-based context with a larger sample size and longer follow-up period. In addition, a more controlled method of data collection could address the limitations outlined in this research. Nevertheless, utility of the ORS and SRS in a sexual offending treatment context could maximise the efficacy of treatment for individuals with a history of sexual offending. Effective treatment for individuals who have engaged in harmful sexual behaviour should reduce dynamic risk, resulting in lowered rates of sexual reoffending.

References

Andrews, D. A., & Bonta, J. (2017). *The Psychology of Criminal Conduct*. Cincinnati, OH:

Anderson Pub. Co.

APA Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice

in psychology. American Psychologist, 61(4), 271–285.

Aydin, B., Akbas, S., Turla, A., & Dundar, C. (2016). Depression and post-traumatic stress

disorder in child victims of sexual abuse: Perceived social support as a protection

factor. *Nordic Journal Of Psychiatry*, *70*(6), 418-423.

doi:10.3109/08039488.2016.1143028

Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Englewood Cliffs, NJ:

Prentice-hall.

Banerjee, A., Chitnis, U. B., Jadhav, S. L., Bhawalkar, J. S., & Chaudhury, S. (2009).

Hypothesis testing, type I and type II errors. *Industrial Psychiatry Journal*, *18*(2),

127–131. http://doi.org/10.4103/0972-6748.62274

Barrera, M., Calderón, L., & Bell, V. (2013). The cognitive impact of sexual abuse and PTSD

in children: A neuropsychological study. *Journal Of Child Sexual Abuse: Research,

Treatment, & Program Innovations For Victims, Survivors, & Offenders*, *22*(6), 625-

638. doi:10.1080/10538712.2013.811141

Black, S. W., Owen, J., Chapman, N., Lavin, K., Drinane, J. M., & Kuo, P. (2017). Feedback

informed treatment: An empirically supported case study of psychodynamic

treatment. *Journal Of Clinical Psychology, 73*(11), 1499-1509. Doi"

10.1002/jclp.22529

Blasko, B. L. (2016). Overview of sexual offender typologies, recidivism, and treatment. In

    E. L. Jeglic, C. Calkins, E. L. Jeglic, C. Calkins (Eds.) , *Sexual violence: Evidence*

    based policy and prevention (pp. 11-29). Cham, Switzerland: Springer International

    Publishing. doi:10.1007/978-3-319-44504-5_2

Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research.

    Psychological Bulletin, *99*(1), 66-77.

Brunswig, K. A., & O'Donohue, W. (2002). *Relapse Prevention for Sexual Harrassers.* New

    York: Kluwer Academic/Plenum Publishers.

Burns, D., & Nolen-Hoeksema, S. (1992). Therapeutic empathy and recovery from

    depression in cognitive behavioral therapy: A structural equation model. .*Journal of*

    Consulting and Clinical Psychology, 60, 441-449. doi:10.1037/0022-006X.60.3.441

Child Protection (Child Sex Offender Government Agency Restriction) Act 2016, s 8.

Comartin, E, B., Kernsmith, P. D., & Miles, B. W. (2010). Family experiences of young adult

    sex offender registration. *Journal of Child Sexual Abuse: Research, Treatment, &*

    Program Innovations For Victims, Survivors, & Offenders, 19(2), 204-225.

    doi:10.1080/10538711003627207

Cousineau, D., & Chartier, S. (2010). Outliers dectection and treatment: A review.

    International Journal of Psychological Research, 3(1), 58-67.

Davis, J. L., & Petretic-Jackson, P. A. (2000). The impact of child sexual abuse on adult

    interpersonal functioning: A review and synthesis of the empirical literature.

Aggression And Violent Behavior, 5(3), 291-328. doi:10.1016/S1359-1789(99)00010-5

Du Mont, J., Macdonald, S., White, M., & Turner, L. (2013). Male victims of adult sexual assault: A descriptive study of survivors' use of sexual assault treatment services. *Journal Of Interpersonal Violence*, 28(13), 2676-2694. doi:10.1177/0886260513487993

Duncan, B. L., Miller, S. D., Sparks, J. A., Claud. D. A., Reynolds, L. R., Brown, J., & Johnson, L. D. (2003). The Session Rating Scale: Preliminary Psychometric Properties of a "Working" Alliance Measure. *Journal of Brief Therapy, 3*(1), 3-12.

Dyer, A., Borgmann, E., Kleindienst, N., Feldmann, R. J., Vocks, S., & Bohus, M. (2013). Body image in patients with posttraumatic stress disorder after childhood sexual abuse and co-occurring eating disorder. *Psychopathology*, 46(3), 186-191. doi:10.1159/000341590

Gordon, A., & Hover, G. (1998). The Twin Rivers Sex Offender Treatment Program. *Sourcebook of Treatment Programs for Sexual Offenders,* New York: Marshall et al. Plenum Press.

Fernandez, Y., Harris, A. J. R., Hanson, R. K., Sparks, J. (2014). *STABLE-2007 Coding Manual: Revised 2014.* Unpublished manual, Public Safety Canada, Ottawa, Ontario.

Finkelhor, D. (1986). Sexual Abuse. *Journal of Psychotherapy & The Family*, 2(2), 53-65.

Gray, S.R. (1995). A comparison of verbal satiation and minimal arousal conditioning to reduce deviant arousal in the laboratory. *Sexual Abuse: Journal Of Research And Treatment, 7*(2), 143-153. doi:10.1007/BF02260201

Hall, G. N., & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. *Journal Of Consulting And Clinical Psychology*, *59*(5), 662-669. doi:10.1037/0022-006X.59.5.662

Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders: A meta-analysis. *Criminal Justice And Behavior*, *36*(9), 865-891. doi:10.1177/0093854809338545

Hanson, R. K., Harris, A. J. R., Scott, T., & Helmus, L. (2007). Assessing the risk of sexual offenders on community supervision (User Report no. 2007– 05). Ottawa, Ontario, Canada: Public Safety and Emergency Preparedness Canada.

Hanson, R. K., Gordon, A., Harris, A. J., Marques, J. K., Murphy, W., Quinsey, V. L., & Seto, M. C. (2002). First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. *Sexual Abuse*, *14*(2), 169-194.

Hanson, R. K., Helmus, L., & Harris, A. R. (2015). Assessing the risk and needs of supervised sexual offenders: A prospective study using STABLE-2007, Static-99R, and Static-2002R. *Criminal Justice And Behavior*, *42*(12), 1205-1224. doi:10.1177/0093854815602094

Hanson, R. K., Lunetta, A., Phenix, A., Neeley, J., & Epperson, D. (2014). The field validity

    of Static-99/R sex offender risk assessment tool in California. *Journal Of Threat*

    Assessment And Management, *1*(2), 102-117. doi:10.1037/tam0000014

Hanson, R. K., & Thornton, D. (2000). Improving risk assessments for sex offenders: A

    comparison of three actuarial scales. *Law And Human Behavior, 24*(1), 119-136.

    doi:10.1023/A:1005482921333

Helmus, L., Hanson, R. K., Babchishin, K. M., & Thornton, D. (2015). Sex offender risk

    assessment with the Risk Matrix 2000: Validation and guidelines for combining with

    the STABLE-2007. *Journal Of Sexual Aggression*, *21*(2), 136-157.

    doi:10.1080/13552600.2013.870241

Helmus, L., Thornton, D., Hanson, R. K., & Babchishin, K. M. (2012) Improving the

    predictive accuracy of Static-99 and Static-2002 with older sex offenders: Revised

    age weights. *Sexual Abuse: Journal Of Research And Treatment, 24*(1), 64-101.

    doi:10.1177/1079063211409951

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working

    Alliance Inventory. *Journal Of Counselling Psychology, 36*(2), 223-233.

    doi:10.1037/0022-0167.36.2.223

Howells, K. (1995). Child sexual abuse: Finkelhor's precondition model revisited.

    Psychology, Crime & Law, *1*(3), 201-214. doi:10.1080/10683169508411956

Hudson, S. M., & Ward, T. (1996). Relapse prevention: Future directions. *Sexual Abuse:*

    Journal Of Research And Treatment, 8(3), 249-256. doi:10.1007/BF02256640

Jennings, J. L., & Deming, A. (2013). Effectively utilizing the 'behavioral' in cognitive-behavioral group therapy of sex offenders. *International Journal Of Behavioral Consultation And Therapy*, *8*(2), 7-13. doi:10.1037/h0100968

Jensen, K., & Kelley, J. M. (2016). The therapeutic relationship in psychological and physical treatments, and their placebo controls. *Psychology Of Consciousness: Theory, Research, And Practice, 3*(2), 132-145. doi:10.1037/cns0000057

Kanters, T., Hornsveld, R. J., Nunes, K. L., Zwets, A. J., Buck, N. L., Muris, P., & van Marle, H. C. (2016). Aggression and social anxiety are associated with sexual offending against children. *The International Journal Of Forensic Mental Health*, *15*(3), 265-273. doi:10.1080/14999013.2016.1193073

Kelley, K., Clark, B., Brown, V., Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care, 15* (3), 261–266.

Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, *113*(1), 164-180. doi:10.1037/0033-2909.113.1.164

Kim, B., Benekos, P. J., & Merlo, A. V. (2016). Sex offender recidivism revisited: Review of recent meta-analyses on the effects of sex offender treatment. *Trauma, Violence, & Abuse*, *17*(1), 105-117. doi:10.1177/1524838014566719

Kingston, D. A., Yates, P. M., & Olver, M. E. (2014). The self-regulation model of sexual offending: Intermediate outcomes and posttreatment recidivism. *Sexual Abuse: Journal Of Research And Treatment*, *26*(5), 429-449. doi:10.1177/1079063213495896

La Fond, J. Q. (2005). The Effectiveness of Registration and Community Notification Laws.

>*Preventing sexual violence: How society should cope with sex offenders* (pp. 85-125).

>Washington, DC, US: American Psychological Association.

Lambert, M. J., & Finch, A. E. (1999). The Outcome Questionnaire. In M.E. Maruish, M. E.

>Maruish (Eds). *The use of psychological testing for treatment planning and outcomes*

>*assessment* (pp. 831-869). Mahwah, NJ, US: Lawrence Erlbaum Associates

>Publishers.

Lambert, M. J., Gregersen, A. T., & Burlingame, G. M. (2004). The Outcome Questionnaire-

>45. In M. E. Maruish, M. E. Maruish (Eds.) , *The use of psychological testing for*

>*treatment planning and outcomes assessment: Instruments for adults, Volume 3, 3rd*

>*ed* (pp. 191-234). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In A. E. Bergin

>& S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (pp. 143-

>189). Oxford, England: John Wiley.

Lambert, M. J. (2010). 'Yes, it is time for clinicians to routinely monitor treatment outcome'.

>In B. L. Duncan, S. D. Miller, B. E. Wampold, M. A. Hubble, B. L. Duncan, S. D.

>Miller, ... M. A. Hubble (Eds.) , *The heart and soul of change: Delivering what works*

>*in therapy* (pp. 239-266). Washington, DC, US: American Psychological Association.

>doi:10.1037/12075-008

Lambert, M. J., Whipple, J. L., Hawkins, E. J., Vermeersch, D. A., Nielsen, S. L., & Smart,

>D. W. (2003). Is It Time for Clinicians to Routinely Track Patient Outcome? A Meta-

>Analysis. *Clinical Psychology: Science And Practice*, *10*(3), 288-301.

>doi:10.1093/clipsy/bpg025

Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., Nielsen, S. L., & Hawkins,

 E. J. (2001). The effects of providing therapists with feedback on patient progress

 during psychotherapy: Are outcomes enhanced?. *Psychotherapy Research*, *11*(1), 49-

 68. doi:10.1093/ptr/11.1.49

Lambie, I., & Stewart, M.W. (2012). Community solutions for the community's problem: An

 evaluation of three New Zealand community-based treatment programs for child

 sexual offenders. *International Journal Of Offender Therapy And Comparative*

 Criminology, 56(7), 1022-1036. doi:10.1177/0306624X11420099

Launay, G. (2001). Relapse prevention with sex offenders: practice, theory and research.

 Criminal Behaviour & Mental Health, *11*(1), 38.

Levine, J. A. & Dandamudi, K. (2016). Prevention of Child Sexual Abuse by Targeting Pre-

 Offenders Before First Offense. *Journal of Child Sexual Abuse, 25*(7), 719-737.

 doi:10.1080/10538712.2016.1208703

Lipsey, M. W. (1990). Design sensitivity. Newbury Park: Sage Publications.

Maikovich-Fong, A. K., & Jaffee, S. R. (2010). Sex differences in childhood sexual abuse

 characteristics and victims' emotional and behavioral problems: Findings from a

 national sample of youth. *Child Abuse & Neglect*, *34*(6), 429-437.

 doi:10.1016/j.chiabu.2009.10.006

Mancini, C., Shields, R. T., Mears, D. P., & Beaver, K. M. (2010). Sex offender residence

 restriction laws: Parental perceptions and public policy. *Journal Of Criminal Justice*,

 38(5), 1022-1030. doi:10.1016/j.jcrimjus.2010.07.004

Marlatt, G. A., & Donovan, D. M. (2005). *Relapse Prevention, Second Edition: Maintenance*

 Strategies in the Treatment of Addictive Behaviors. New York: Guilford Press.

Martinson, R. (1974). What works - questions and answers about prison reform. *Public Interest, 35*, 22-54.

Marshall, W. L., & American Psychological Association. (2011). Rehabilitating sexual offenders: A strength-based approach. Washington, DC: American Psychological Association.

Marshall, W. L., & Barbaree, H. E. (1990). An integrated theory of the etiology of sexual offending. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Applied clinical psychology. Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 257-275). New York: Plenum Press.

Meloy, M., Curtis, K., & Boatwright, J. (2013). Policy-makers' perceptions on their sex offender laws: The good, the bad, and the ugly. *Criminal Justice Studies: A Critical Journal Of Crime, Law & Society*, *26*(3), 273-288.

Miller, S. D., & Bargmann, S. (2012). The Outcome Rating Scale (ORS) and the Session Rating Scale (SRS). *Integrating Science and Practice, 2*(2), 28-31.

Miller, S. D., Duncan, B. L., Brown. J., Sparks. J. A., & Claud. D. A. (2003). The Outcome Rating Scale: A Preliminary Study of the Reliability, Validity, and Feasability of a Brief Visual Analogue Measure. *Journal of Brief Therapy, 2*(2), 91-100.

Miller, S. D., Duncan, B. L., Sorrell, R., & Brown, G. S. (2005). The Partners for Change Outcome Management System. *Journal Of Clinical Psychology*, *61*(2), 199-208.

Miller, W. R. & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior.* New York: Guilford Press.

Miller, W. R. & Rollnick, S. (2012). *Motivational Interviewing: Helping People change.*

New York: Guilford Press.

Ministry of Justice. (2014). *New Zealand Crime and Safety Survey.* Retrieved from:

https://www.justice.govt.nz/assets/Documents/Publications/NZCASS-201602-Main-

Findings-Report-Updated.pdf

Mogavero, M. C., & Kennedy, L. W. (2017). The social and geographic patterns of sexual

offending: Is sex offender residence restriction legislation practical?. *Victims &*

Offenders, *12*(3), 401-433. doi:10.1080/15564886.2015.1084962

Moster, A., Wnuk, D. W., & Jeglic, E. L. (2008). Cognitive behavioral therapy interventions

with sex offenders. *Journal Of Correctional Health Care*, *14*(2), 109-121.

doi:10.1177/1078345807313874

Nadesu, A. (2011). Five year follow up study: sex offenders against children vs offenders

against adults. *Reconviction Rates of Sex Offenders.* Department of Corrections.

Retrieved:

http://www.corrections.govt.nz/__data/assets/pdf_file/0008/672317/Reconviction_Rat

es_of_Sex_Offenders_-_five_year_follow_up.pdf

Olver, M.E., Wong, S. P., Nicholaichuk, T., & Gordon, A. (2007). The validity and reliability

of the Violence Risk Scale-Sexual Offender version: Assesing sex offender risk and

evaluating therapeutic change. *Psychological Assessment, 19*(3), 318-329.

Pallant, J. (2007). SPSS survival manual: A step by step guide to data analysis using SPSS

for Windows. Maiden Head, Open University Press/McGraw-Hill.

Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The prevalence of child

    sexual abuse in community and student samples: A meta-analysis. *Clinical*

    Psychology Review, *29*(4), 328-338. doi:10.1016/j.cpr.2009.02.007

Phenix, A., Fernandez, Y., Harris, A. J. R., Helmus, M., Hanson, K., & Thornton, D. (In

    Press). *Static-99R Coding Rules – Revised.* Retrieved:

    http://www.static99.org/pdfdocs/Coding_manual_2016_v2.pdf

Pithers, W. D., & Gray, A. S. (1996). Utility of relapse prevention in treatment of sexual

    abusers. *Sexual Abuse: A Journal Of Research And Treatment, 8*(3), 223-230.

    doi:10.1007/BF02256637

Prescott, D. S., & Miller, S. D. (2014). Improving outcomes one client at a time: Feedback-

    informed treatment with adults who have sexually abused. *Association for the*

    Treatment of Sexual Abusers, 26(2-3), 1-11.

Prochaska, J. O., DiClemente, C. C., & Norcross, J.C. (1992). In search of how people

    change: Applications to addictive behaviors. *American Psychologist, 47*(9), 1102-

    1114. doi:10.1037/10248-026

Schaffer, M., Jeglic, E. L., Moster, A., & Wnuk, D. (2010). Cognitive-behavioral therapy in

    the treatment management of sex offenders. *Journal Of Cognitive Psychotherapy*,

    24(2), 92-103.

Sentencing Act 2002, s 70.

Stiles, W. B. (1980). Measurement of the impact of psychotherapy sessions. *Journal Of*

    Consulting And Clinical Psychology, 48(2), 176-185. doi:10.1037/0022-

    006X.48.2.176

Stucky, T. D., & Ottensman, J. R. (2016). Registered Sex Offenders and Reported Sex

    Offenses. *Crime & Delinquency, 62*(8), 1026-1045. doi:10.1177/0011128714556738

Tierney, D. W., & McCabe, M. P. (2005). The Utility of the Trans-Theoretical Model of

    Behavior Change in the Treatment of Sex Offenders. *Sexual Abuse: Journal of*

    Research And Treatment, 17(2), 153-170. doi:10.1177/107906320501700206

Walker-Williams, H. J., & Fouché, A. (2017). A strengths-based group intervention for

    women who experienced child sexual abuse. *Research On Social Work Practice*,

    27(2), 194-205. doi:10.1177/1049731515581627

Ward, T. (2000). Relapse prevention: Critique and reformulation. *Journal of Sexual*

    Aggression, 5(2), 118-133. doi:10.1080/13552600008413303

Ward, T. (2002). Good lives and the rehabilitation of offenders: Promises and problems.

    Aggression And Violent Behavior, *7*(5), 513-528. doi:10.1016/S1359-1789(01)00076-

    3

Ward, T. (2002). Marshall and Barbaree's integrated theory of child sexual abuse: A critique.

    Psychology, Crime & Law, *8*(3), 209-228. doi:10.1080/10683160208401816

Ward, T., & Beech, A. (2006). An integrated theory of sexual offending. *Aggression And*

    Violent Behaviour, 11(1), 44-63. doi:10.1007/978-1-4939-2416-5_1

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*(1), 77-94. doi:10.1016/j.avb.2005.06.001

Ward, T., Mann, R. E., & Gannon, T. A. (2007). The good lives model of offender rehabilitation: Clinical implications. *Aggression And Violent Behavior*, *12*(1), 87-107. doi:10.1016/j.avb.2006.03.004

Ward, T., & Siegert, R. J. (2002) Toward a comprehensive theory of child sexual abuse: A theory knitting perspective. *Psychology, Crime & Law*, *8*(4), 319-351.

Ward, T., & Stewart, C. A. (2003). The treatment of sex offenders: Risk management and good lives. *Professional Psychology: Research And Practice*, *34*(4), 353-360. doi:10.1037/0735-7028.34.4.353

Whipple, J. L., Lambert, M. J., Vermeersch, D. A., Smart, D. W., Nielsen, S. L., & Hawkins, E. J. (2003). Improving the effects of psychotherapy: The use of early identification of treatment and problem-solving strategies in routine practice. *Journal Of Counseling Psychology*, *50*(1), 59-68. doi:10.1037/0022-0167.50.1.59

Willis, G. M., Yates, P. M., Gannon, T. A., & Ward, T. (2013). How to integrate the good lives model into treatment programs for sexual offending: An introduction and overview. *Sexual Abuse: Journal Of Research And Treatment*, *25*(2), 123-142. doi:10.1177/1079063212452618

Witkiewitz, K. A. M. G. A. (2011). *Therapist's Guide to Evidence-Based Relapse Prevention.* Burlington: Elsevier Science.

Wolfe, V. V., Gentile, C., & Wolfe, D. A. (1989). The impact of sexual abuse on children: A PTSD formulation. *Behavior Therapy*, *20*(2), 215-228. doi:10.1016/S0005-7894(89)80070-X