A Comparison of the Application of the Self-Regulation Model of the Relapse Process for Mainstream and Special Needs Sexual Offenders

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Abstract The self-regulation model of the relapse process (Ward & Hudson, 2000) has been developed and empirically validated on general sexual offender populations (Bickley & Beech, 2002), but not on specific sexual offender populations. This paper aims to investigate whether special needs offenders, as compared to mainstream sexual offenders, can be categorized into the offense pathways described in the model. In addition, this paper aims to evaluate the application of the self-regulation model in highlighting the treatment needs of the special needs group. Special needs sexual offenders are defined as a treatment population that includes individuals with lower functioning, limited social and communication skills, and literacy deficits. Participants were classified into the self-regulation model using a method developed by Bickley and Beech (2002). Demographic and offense information were collected and comparisons made between the special needs and mainstream groups. The results showed that the sexual offenders with special needs could be reliably classified into the offense pathways of the self-regulation model. The largest group of special needs offenders was in the approach-automatic group, followed by the approach-explicit group. The results indicated no significant differences in representation in the offense pathways between the special needs and mainstream sexual offenders. The results also indicate that the special needs group would benefit from a responsive approach to treatment, which incorporates appropriate treatment targets identified by the self-regulation model.

Keywords Self-regulation model · Special needs · Sexual offender treatment

Introduction

Research into sexual offending behavior has more recently focused on the application of treatment to distinct populations of sexual offenders (e.g. Hunter & Figueredo, 1999; Lindsay, 2002). This research has stemmed from the recognition that, in order for treatment

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to be effective, sexual offender treatment cannot be generic. That is, treatment must target the risk of the individual, the needs of the individual and it must be delivered in a manner that is appropriate for the individual (Andrews & Bonta, 2003). In order to provide appropriate and effective treatment, theory needs to guide research, which then guides therapeutic interventions.

Although research is increasing, there have been few theoretical developments for distinct sexual offender populations (Lindsay, 2005; Wilcox, 2004). In an effort to address this issue, Keeling and Rose (2005) have attempted to integrate research about sexual offenders with an intellectual disability into a theoretical context by examining the self-regulation model of the relapse process (Ward & Hudson, 2000). Given that relapse prevention is incorporated into treatment programs for sexual offenders with an intellectual disability (Haaven & Coleman, 2000) and special needs (Keeling & Rose, 2005), it seems paramount that the application of relapse theory be empirically evaluated. This represents the main aim of this paper.

Intellectual disability and special needs

To date there is little research on offender populations with special needs however, the inclusion of people with borderline intellectual functioning in intellectual disability research studies is common (Lambrick, 2003). Study populations described as intellectually disabled have included individuals with borderline or below average intellectual functioning (e.g. Friedman, Festinger, Nezu, McGuffin, & Nezu, 1999; Lindsay & Smith, 1998). As a result it is possible there are similarities between the special needs and intellectual disability populations.

The term 'special needs' is used to describe a sexual offender treatment population in an Australian correctional system. A treatment program for sexual offenders with special needs was developed because it was identified that a number of offenders were being excluded from mainstream sexual offender treatment as a result of skills deficits. This treatment program represents an effort to provide a responsive intervention to a previously neglected group of offenders. The need for providing treatment to offenders with borderline intellectual functioning has previously been highlighted. Lambrick (2003) noted that many of these individuals may not receive the level of support that offenders with an intellectual disability do, although their needs may be just as paramount.

Any offenders that were not appropriate for the mainstream program were considered, however offenders were not admitted to the program if they had significant deficits that would make treatment participation difficult. The characteristics of the special needs population included mild or borderline intellectual functioning, social skills deficits, acquired brain injury and poor literacy. Offenders were also considered if they had other deficits that excluded them from the mainstream group (e.g. significant literacy deficits), but their intellectual functioning fell above the borderline range. It is recognised that some of these features are evident in mainstream offender populations (Blackburn, 1997); however mainstream sexual offenders are assessed as being able to cope with the demands of treatment programs (Bickley & Beech, 2002). This is not the case for special needs sexual offenders and the described characteristics represent greater deficits than those observed in the mainstream population.

The self-regulation model of the relapse process

The original model of relapse prevention was adapted and developed for addressing sexual offending behavior by Pithers (e.g. Pithers, Marques, Gibat, & Marlatt, 1983) and Marques

(e.g. Marques & Nelson, 1989). The self-regulation model of the relapse process (Ward & Hudson, 2000) has been developed as a result of significant criticism of the original model of relapse prevention (e.g. Laws, 1999; Thornton, 2002). Importantly, Hanson (2000) questioned the utility of a model that identified a single pathway to offending and the need for a multiple pathway model, such as the self-regulation model, has been pioneered by a number of authors (Laws, 2003; Ward & Hudson, 1998; Ward & Hudson, 2000).

The self-regulation model (Ward & Hudson, 2000) postulates that deficits in self-regulation lead to an increased likelihood of sexual reoffending. Self-regulation is a process whereby internal and external processes allow and motivate an individual to engage in goal-orientated behaviors (Baumeister & Heatherton, 1996); the goal is the concept that directs the self-regulatory behavior (Cochran & Tesser, 1981). In relation to sexual offending, the goal can either be to avoid offending (avoidant goals) or to offend (approach goals). The relapse process involves nine phases, which are fluid and provide different stages that an offender may intervene and exit the relapse process using appropriate coping strategies. Ward and Hudson described the multiple pathways process of relapse as involving four possible pathways combining self-regulation style and offense-related goal: avoidant-passive, avoidant-active, approach-automatic, and approach-explicit. Thus, they describe four different offenders with specific characteristics, which are useful in identifying the types of offenders who relapse via the different pathways. These have been used to discuss the relevance of the self-regulation model for sexual offenders with an intellectual disability (Keeling & Rose, 2005).

Through reviewing the literature about characteristics of sexual offenders with intellectual disabilities, Keeling and Rose (2005) have identified a number of similarities between this population and the offense pathways of the self-regulation model (Ward & Hudson, 2000). In doing so, Keeling and Rose propose that sexual offenders with an intellectual disability would be most likely to offend via the avoidant-passive or approach-automatic pathways.

The avoidant-passive offender's behavior is characterised by poor coping and impulsivity, which have both been identified as characteristics of sexual offenders with an intellectual disability (Glaser & Deane, 1999; Lane, 1991; Nezu, Nezu, & Dudek, 1998). The approach-automatic offender also behaves impulsively, with little planning involved in his efforts to offend. However, this behavior is significantly influenced by over-learned behavioral scripts, which develop over time as the result of past offending (Ward & Hudson, 2000). Offending by sexual offenders with an intellectual disability may go unreported due to inconsistent responses by authorities (Clare & Murphy, 1998) and the belief that this behavior is merely inappropriate, rather than sexual offending (Lambrick, 2003). Thus, sexual offenders may have developed offense scripts over time as the result of unreported or undetected offending.

The other two pathways are characterized by an insight to avoid offending (avoidant-active) and conscious, explicit planning (approach-explicit). As such, Keeling and Rose (2005) identified that the remaining two pathways were likely to share few similarities with sexual offenders who have an intellectual disability.

There have been few empirical evaluations of the self-regulation model for mainstream offenders. Bickley and Beech (2002) investigated the validity of the self-regulation model for child sexual offenders. They found that the offenders could be reliably classified into the model and that there were distinct differences between characteristics of offenders in the different offense pathways. More recently, Webster (2005) provided further support for the validity of the model. Both studies found that the most common offense pathway was the approach-explicit pathway. There has been no examination of the self-regulation model to specific sexual offender populations, such as those with special needs.



The current study

This study aims to evaluate how special needs offenders can by accommodated by the self-regulation model, in comparison to mainstream offenders, and examine the relevance of these findings to treatment. In order to empirically evaluate the self-regulation model of relapse prevention for special needs sexual offenders, this study aims to investigate whether these offenders can be categorized into the pathways of the self-regulation model. It was hypothesized that special needs offenders would be reliably classified into the pathways of the self-regulation model and that they would be over-represented in the approach-automatic and avoidant-passive pathways.

Method

Ethical approval

This was obtained for this research from NSW Corrections Ethics Committee and each participant had consented for this data to be used for the purposes of research.

Setting

All of the participants were involved in a residential custodial-based treatment program for moderate and high risk sexual offending behavior. Statewide correctional psychologists referred participants to the program and, during this referral phase, participants were reviewed for suitability to the special needs or mainstream program. Assessment information collected for admission to the special needs program included a skills-based assessment (including a clinical assessment of communication, social and self-help skills), an assessment of intellectual functioning (WAIS III; Wechsler, 1997) and the collection of relevant information, such as education history, literacy ability and custodial staff reports.

Participants

Sixty-four male sexual offenders participated in this study, comprising of 16 special needs sexual offenders and 48 mainstream offenders. Each special needs offender was matched with three mainstream offenders using the criterion of risk level (as determined by the Static-99, Hanson & Thornton, 2000) and offense type (child, adult or both) in order to ensure that these factors were controlled for in the analysis. Other demographic information was collected for each participant.

Special needs participants

The mean age of participants was 35.81 (SD=7.4, ranging from 25 to 46 years old). All the special needs participants were Australian, including 5 Aboriginal or Torres Strait Islanders. The mean Intelligence Quotient (IQ) for this group was 71.32 (SD=6.37, ranging from 63 to 84). Seven participants had mild intellectual functioning (43.75%), seven participants had borderline intellectual functioning (43.75%), and two participants had below average intellectual functioning (12.5%). Fourteen participants (87.5%) had left school before the age of fifteen, while six participants (37.5%) attended special education classes or schools. Eight participants (50%) had previously been accommodated in special units for people who



presented as too vulnerable to be placed in either mainstream or general protection areas in prison.

Three quarters of the participants were in a relationship at the time of offending, with 25% (n=4) single at time of offending. The special needs participants had offended against adults (44%, n=7), children (44%, n=7), and against both adults and children (12%, n=2). The majority of special needs offenders committed offenses against female victims (75%, n=12), with 3 (19%) participants offending against males, and 1 (6%) participant offended against both male and female victims. Ten (62.5%) participants had prior convictions for sexual offending. From the total special needs sample, 70% (n=11) completed treatment.

Mainstream participants

The mean participants' age was 41.92 (SD = 11.99, ranging from 21 to 70 years old.). The majority of participants were Australian (79%, n = 38), including 7 Aboriginal or Torres Strait Islanders, while 21 (n = 10) represented other nationalities. Unfortunately, as this data was collected retrospectively and an assessment of intellectual functioning is not routinely collected for mainstream sexual offenders, no intellectual functioning information was available. However, the requirements for this treatment program included reading and writing, as well as an ability to cope with the demands of the program, and it seems likely that this population had significantly higher levels of intellectual functioning and adaptive skills than the offenders with special needs.

The majority of participants were in a relationship at the time of the offending (79%, n = 38) and 10 (21%) were single at the time of the offending. Of the mainstream participants, equal numbers had offended only against adults (44%, n = 21) or only against children (44%, n = 21) and 12% (n = 6) of the sample had offended against both adults and children. The majority of participants had committed offenses against females (77%, n = 37), with fewer offending against males (17%, n = 8) and offending against both males and females (6%, n = 3). Fifty-nine percent (n = 28) had been convicted of one or more previous sexual offense(s). Of the 48 mainstream participants in this study, a total of 35 (73%) completed treatment.

Classification of the sample

In order to classify the participants into the offense pathways, a file review was completed. The reviewed file contained detailed information including court documents, criminal and social history, a detailed description of the offense processes in the form of a general offense cycle and treatment reports. The classification procedure involved using this file information to complete the checklist devised by Bickley and Beech (2002), which provided a practical method for assessing the offense-related goal and self-regulation style of each participant. The checklist includes nine assessment areas, all rated on a scale of one to ten, which have been devised from the descriptions of offender characteristics in the self-regulation model. Prior to rating the participants, each rater was trained in an identical manner using case examples. This training involved reading the Ward and Hudson (1998) paper and working through the case examples in the paper. It was ensured that each rater was able to correctly identify the pathway of each of the example cases using the checklist prior to rating the participants in the study. The checklist was completed for each participant and the score in each area was collated to determine the offense pathway.

In order to investigate the reliability of the offense pathway ratings for the mainstream participants, a second rater was used in 60% (n = 29) of cases. This enabled us to establish

	Rater 1					
	Approach- explicit	Approach- automatic	Avoidant- active	Avoidant- passive	Total	
Rater 2						
Approach-explicit	7	3	0	0	10	
Approach-automatic	1	12	1	1	14	
Avoidant-active	0	0	0	0	0	
Avoidant-passive	0	1	0	3	4	
Agreement	87.5%	75%	0%	75%	76%	

Table 1 Classification of mainstream offenders included in inter-rater reliability analysis (n = 29)

reliability for the most frequently occurring classifications. Reliability was established for these groups and for the remaining 40% of the sample, only one rater was employed. For all of the participants with special needs, a second rater was employed to establish inter-rater reliability.

Results

Reliability of offense pathway coding

Inter-rater reliability was assessed using Cohen's (1960) kappa and these were evaluated according to the guidelines in interpreting the kappa coefficient (Landis & Koch, 1977). These guidelines state that .21 to .40 is 'fair' reliability, .41 to .60 is 'moderate' reliability, .61 to .80 is 'substantial' reliability, and .81 to 1.00 is 'almost perfect' reliability. When there was disagreement between the two raters, a third rater was employed.

Table 1 shows the classification of the mainstream participants and the degree of agreement between raters. The classifications into one of the four pathways had an overall agreement of 76% and, when analyzed using kappa, the reliability of this classification was 'moderate' ($\kappa=0.60$). The classification with the highest agreement between the two raters was the approach-explicit group, followed by the approach-automatic and avoidant-passive groups. There was only one participant classified as avoidant-active and this rating was not confirmed by the second rater.

All of the special needs offenders were rated twice for the purpose of inter-rater reliability with an overall agreement of 94% ('almost perfect' reliability ($\kappa = .88$)). The classifications

Table 2 Classification of special needs offenders included in inter-rater reliability analysis (n = 16)

	Rater 1					
	Approach- explicit	Approach- automatic	Avoidant- active	Avoidant- passive	Total	
Rater 2						
Approach-explicit	5	0	0	0	5	
Approach-automatic	1	9	0	0	10	
Avoidant-active	0	0	0	0	0	
Avoidant-passive	0	0	0	1	1	
Agreement	83%	100%	N/A	100%	94%	



Avoidant-active Avoidant-passive

offense pathways						
Offense pathway	Mainstream $(n=48)$	Special needs $(n = 16)$				
Approach-explicit	20 (41.7%)	5 (31.3%)				
Approach-automatic	20 (41.7%)	10 (62.5%)				

0

1 (6.3%)

2 (4.2%)

6(12.5%)

Table 3 Comparisons of classifications between the special needs and mainstream offenders into the offense pathways

with the highest agreement were the approach-automatic and avoidant-active (although only one person was classified as avoidant-active), followed by the approach-explicit group. No participants were classified avoidant-active in the special needs group (Table 2).

Offense pathway classification

The approach-explicit and approach-automatic pathways were the most common for the mainstream offenders, with equal numbers in each category (Table 3). The least common pathway was the avoidant-active category. For the offenders with special needs, the largest group was in the approach-automatic pathway followed by the approach-explicit pathway, as shown in Table 3. Using chi-square analyses, it was found that there were no significant differences between the frequency of special needs offenders and the mainstream offenders in each of the four pathways.

Discussion

Classification of offenders

This research has shown that special needs sexual offenders can be reliably classified into the pathways of the self-regulation model (Ward & Hudson, 2000). The high inter-rater reliability of classifications of the special needs offenders appears to demonstrate that the offense processes in this population can be accounted for by the self-regulation model.

The results demonstrated that the special needs group were not significantly different from the mainstream group in the frequency of classification in each pathway. The special needs offenders, in contrast to the mainstream offenders, were not over-represented in either the avoidant-passive or approach-automatic offense pathways, or where they over-represented in the passive/automatic regulation style. Interestingly, there were more special needs offenders who offended via the approach-explicit than the avoidant-passive pathway. These results are consistent with the findings of Bickley and Beech (2002) and Webster (2005), who found that the most common offense pathway is the approach-explicit. This further supports the notion that there is little to differentiate between mainstream sexual offenders and sexual offenders with special needs in terms of the relapse process.

Given the characteristics of the approach-explicit offender as including intact self-regulation, control, conscious planning (Ward & Hudson, 2000), this result was unexpected. It was proposed that sexual offenders with special needs would identify with the poorly planned behavior and impulsivity noted in sexual offenders with an intellectual disability



(Glaser & Deane, 1999). However, these results indicate that sexual offenders with special needs are capable of intact self-regulation and engaging in explicit planning.

Treatment implications for sexual offenders with special needs

This research has provided support for the application of the self-regulation model (Ward & Hudson, 2000) for sexual offenders with special needs. In doing so, it raises questions about the utility, effectiveness and appropriateness of a generic relapse prevention intervention for this group. The implications of the self-regulation model for sexual offenders with special needs are two-fold. Firstly, the self-regulation model presents a theoretical basis for assessing self-regulatory deficits and offense-related goals. Secondly, it provides a theory-driven approach to treatment. That is, treatment should address self-regulation and offense-related targets, all of which need to be tailored to suit the offender's individual needs. However, given that the results in this study appear to indicate little difference between the relapse processes of mainstream sexual offenders and sexual offenders with special needs, it is feasible that these treatment implications are also relevant to mainstream sexual offenders.

In terms of assessing self-regulation and offense-related goals, this research has employed the offense pathways checklist developed by Bickley and Beech (2002). The results in this analysis support this assessment tool as a valid and reliable form of assessment. It enables an identification of deficits in each of the areas and, as such, provides a useful guide for intervention.

The identification of characteristics in each pathway has provided specific treatment targets that could be used to address individual needs (Polaschek, 2003; Ward & Hudson, 2000). The majority of the special needs offenders followed approach goals, which highlights that treatment should target areas that relate to these goals. This could include treatment that addresses cognitive distortions, victim empathy, deviant sexual interest, pro-offending behaviors, and motivation for change. In addition to addressing approach goals, Ward and Hudson identified that offending by the approach-explicit offender may be influenced by early developmental experiences that lead to maladaptive beliefs. As such, they recommend that treatment should focus on identifying and addressing these issues through cognitive restructuring and developing perspective taking.

The results also indicated that, although similar to the mainstream sexual offenders, an automatic self-regulation style was also prevalent in the special needs group. These offenders would benefit from treatment focusing on improving self-regulatory abilities, such as improving problem solving and coping skills, and addressing locus of control issues. In addition to addressing general self-regulation deficits with this group, Ward and Hudson (2000) suggested that treatment should focus on an increasing awareness of offense scripts and strengthening meta-cognitive control in an effort to reduce the impact of behavioral scripts on sexual offending.

Limitations and further research

Firstly, it is important to address the definition of the special needs group. It is recognised that this represents a limitation of this study. This group was driven by the clinical and practical constraints of the environment and represents a fluid population. This poses difficulties for generalising results and attempts should be made in the future towards defining a clearer inclusion and exclusion criteria for treating sexual offenders with special needs.



The methodology used to classify individuals into the pathways of the self-regulation model relied on the interpretation of staff records of offences. Previous research has suggested that when individual offenders are interviewed directly about their offence they can provide more detail than staff report (Courtney, Rose, & Mason, 2006). This could lead to inaccuracies in the data or potential biases in the collection and analysis of data. The findings of this study are also limited by the small sample of special needs offenders and issues of whether these results will generalize to larger populations need to be considered.

This research has identified a number of treatment implications in applying the self-regulation model to sexual offenders with special needs. Further research would be beneficial to evaluate the efficacy of these interventions with this population. This would add further support for the practical application of the self-regulation model.

Conclusions

There have been few theoretical developments towards specific populations of sexual offenders. This study has attempted to address this through applying a theoretical model of the relapse process to sexual offenders with special needs. Through the classification procedure, it has been identified that offending by special needs offenders can be accounted for by the self-regulation model of the relapse process. In fact, it appears that there are very few differences in the relapse process between the special needs and mainstream sexual offenders. Although there are a number of limitations, this study represents an important step towards integrating theory into the assessment and treatment process of sexual offenders with special needs.

References

- Andrews, D. A., & Bonta, J. (2003). *The psychology of criminal conduct* (3rd ed.). Cincinnati, OH: Anderson. Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7, 1–15.
- Bickley, J. A., & Beech, A. R. (2002). An investigation of the Ward and Hudson pathways model of the sexual offense process with child abusers. *Journal of Interpersonal Violence*, 17, 371–393.
- Blackburn, R. (1997). The psychology of criminal conduct. Chichester, UK: John Wiley and Sons.
- Blanchard, R., Watson, M., Choy, A., Dickey, R., Klassen, P., Kuban, N., & Feren, D. J. (1999). Paedophiles: Mental retardation, maternal age and sexual orientation. Archives of Sexual Behaviour, 28, 111–127.
- Clare, I. C. H., & Murphy, G. H. (1998). Working with offenders or alleged offenders with intellectual disabilities. In E. Emerson, C. Hatton, J. Bromley, & A. Caine (Eds.), Clinical psychology and people with intellectual disabilities (pp. 154–176). Chichester, UK: John Wiley & Sons.
- Cochran, W., & Tesser, A. (1981). The "what the hell" effect. Some effects of goal proximity and goal framing performance. In M. Leonard and A. Tesser (Eds.), Striving and feeling: Interactions among goals, affect, and self-regulation (pp. 99–120). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37–46.
- Courtney, J., Rose, J., & Mason, O. (2006). The offence process of sex offenders with intellectual disabilities: A qualitative study. Sexual Abuse: A Journal of Research and Treatment, 18(2), 169–191.
- Friedman, S. H., Festinger, D. S., Nezu, C. M., McGuffin, P. W., & Nezu, A. M. (1999). Group therapy for mentally retarded sex offenders: A behavioral approach. *The Behavior Therapist*, 22, 32–33.
- Glaser, W., & Deane, K. (1999). Normalization in an abnormal world: a study of prisoners with an intellectual disability. *Journal of Offender Therapy and Comparative Criminology*, 43, 338–350.
- Haaven, J. L., & Coleman, E. M. (2000). Treatment of the developmentally disabled sex offender. In D. R. Laws, S. M. Hudson, & T. Ward (Eds.), Remaking relapse prevention with sex offenders (pp. 369–388). Thousand Oaks, CA: Sage Publications.



- Haaven, J., Little, R., & Petre-Miller, D. (1990). Treating intellectually disabled sex offenders: A model residential program. Orwell, VT: Safer Society Press.
- Hanson, R. K. (2000). What is so special about relapse prevention? In D. R. Laws, S. M. Hudson, & T. Ward (Eds.), *Remaking relapse prevention: A sourcebook* (pp. 27–38). Thousand Oaks, CA: Sage Publications.
- Hanson, R. K. & Thornton, D. (2000). Improving risk assessments for sex offenders: A comparison of three actuarial scales. Law & Human Behavior, 24, 119-136.
- Hunter, J. A., & Figueredo, A. J. (1999). Factors associated with treatment compliance in a population of juvenile sexual offenders. Sexual Abuse: A Journal of Research and Treatment, 11, 46-67.
- Keeling, J. A., & Rose, J. L. (2005). Relapse prevention with intellectually disabled sexual offenders. Sexual Abuse: A Journal of Research and Treatment, 17, 407–423.
- Keeling, J., & Rose, J. L. (2006). The adaptation of a cognitive-behavioral treatment program for special needs sexual offenders. *British Journal of Learning Disabilities*, 34, 110–116.
- Lambrick, F. (2003). Issues surrounding the risk assessment of sexual offenders with an intellectual disability. *Psychiatry*, *Psychology and Law*, 10, 353–358.
- Landis, J. R., & Koch, G. G. (1977). A one-way components of variance model for categorical data. *Biometrics*, 33, 671–679.
- Lane, S. L. (1991). Special offender populations. In G. D. Ryan & S. L. Lane (Eds.), Juvenile sexual offending: Causes and consequences (pp. 229-232). Lexington: Lexington Press.
- Laws, R. D. (1999). Relapse prevention: The state of the art. *Journal of Interpersonal Violence*, 14, 285–302.
- Laws, R. D. (2003). The rise and fall of relapse prevention. Australian Psychologist, 38, 22-30.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment*, 38, 377–383.
- Lindsay, W. R. (2002). Research and literature on sex offenders with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 46, 74–85.
- Lindsay, W. R. (2005). Model underpinning treatment for sexual offenders with mild intellectual disability: Current theories of sex offending. *Mental Retardation*, 43, 428–441.
- Lindsay, W. R., & Smith, A. H. W. (1998). Responses to treatment for sex offenders with intellectual disability: A comparison of men with 1- and 2-year probation sentences. *Journal of Intellectual Disability Research*, 42, 346–353.
- Marques, J. K., & Nelson, C. (1989). Understanding and preventing relapse in sex offenders. In M. Gossop (Ed.), *Relapse and addictive behavior* (pp. 96–106). New York, NY: Tavistock/Routledge.
- Nezu, C. M., Nezu, A. M., & Dudek, J. A. (1998). A cognitive behavioral model of assessment and treatment for intellectually disabled sexual offenders. Cognitive and Behavioral Practice, 5, 25–64.
- Pithers, W. D., Marques, J. K., Gibat, C. C., & Marlatt, G. A. (1983). Relapse prevention with sexual aggressives: A self-control model of treatment and maintenance change. In J. G. Greer & I. R. Stuart (Eds.), The sexual aggressor: Current perspectives on treatment (pp. 214–239). New York: Van Nostrand Reinhold.
- Polaschek, D. L. L. (2003). Relapse prevention, offense process models, and the treatment of sexual offenders. Professional Psychology: Research & Practice, 34, 361–367.
- Thornton, D. (2002). Constructing and testing a framework for dynamic risk assessment. Sexual Abuse: A Journal of Research and Treatment, 14, 139–154.
- Ward, T., & Hudson, S. M. (1998). A model of the relapse process in sexual offenders. *Journal of Interpersonal Violence*, 13, 700–725.
- Ward, T., & Hudson, S. M. (2000). A self-regulation model of relapse prevention. In D. R. Laws, S. M. Hudson, & T. Ward (Eds.), Remaking relapse prevention with sex offenders (pp. 79-101). Thousand Oaks, CA: Sage Publications.
- Webster, S. D. (2005). Pathways to sexual offense recidivism following treatment. Journal of Interpersonal Violence, 20, 1175–1196.
- Wechsler D. (1997). WAIS-III administration and scoring manual. San Antonio, TX: The Psychological Corporation (www.harcourtassessment.com).
- Wilcox, D. T. (2004). Treatment of intellectually disabled individuals who have committed sexual offences: A review of the literature. *Journal of Sexual Aggression*, 10, 85–100.