

Understanding and Improving Therapeutic Engagement with
Adolescent Sexual Offenders

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Abstract

Since the 1980s there has been an increasing recognition and concern that adolescents comprise more than one-quarter of all sex offenders (Finkelhor, Ormrod & Chaffin, 2010). As part of a broader community response to this problem, substantial clinical and research attention has been dedicated to developing specialised treatment programs for adolescent sexual offenders (ASOs). As with many clinical and clinical-forensic populations, clinicians have been inconsistent in their ability to effectively engage ASOs in therapy, with high non-completion rates associated with many specialised programs. Poor therapeutic engagement (TE) of ASOs may not only result in inefficient commitment of clinical resources, but may also lead to breaches of statutory orders, increased costs associated with further court and youth justice services, and to detention that may otherwise have been avoidable. Perhaps of greatest concern is the consistent observation in both adolescent and adult samples that sexual offenders who begin but do not complete treatment may be at higher risk of recidivism.

The present thesis reports four empirical studies that together aim to improve understanding of TE with ASOs. The first study aimed to identify multisystemic predictors of TE in a sample of court-referred male ASOs ($N = 105$, mean age = 15.53, $SD = 1.30$) participating in specialised treatment between 2001 and 2005. Correlation analysis identified peer relationships, Indigenous status and impulsivity/antisociality as significantly associated with poorer TE. Multiple regression analysis found that a model comprising these three predictors accounted for 33% of the variance of TE. Impulsivity/antisociality and Indigenous status were identified as unique predictors of TE, accounting for 11% and 13% of unique variance, respectively.

Study 2 aimed to examine whether the engagement of caregivers and caseworkers involved in the ASOs' treatment was associated with ASO TE. The sample comprised 16 male ASOs (mean age 15.13, $SD = 1.15$), 16 caseworkers, and 8 caregivers participating in treatment. Correlations between caseworker or caregiver TE and ASO TE were weak; however caregiver TE was strongly correlated with satisfactory progress in treatment for the ASOs. In addition, clinicians' and caseworkers' ratings of ASO TE and ASO self-rated TE were strongly correlated. Impulsivity/antisociality was strongly correlated with poor TE.

The present thesis was conducted with clients and stakeholders of a collaborative, multisystemic, field-based practice model. Study 3 examined whether involvement in this collaborative multisystem treatment model (CMTM) would enhance collaborative treatment partners' (CTPs) knowledge, skills and confidence in working with ASOs. Study 3 also examined whether CTP knowledge skills and confidence was associated with ASO TE and treatment progress. The sample comprised 35 CTPs (usually caseworkers) whose questionnaire data was matched with treatment data from 35 ASOs (mean age 14.83, $SD = 1.50$) with whom the CTPs were involved. CTPs reported significant improvements in their level of knowledge, skills and confidence in working with ASOs postcollaboration. CTPs reported significantly greater benefits than obstacles with regards to working within the collaborative treatment model. However this study found only weak relationships between CTP knowledge, skills and confidence and ASO TE or satisfactory treatment progress. Study 3 once again provided further support for the negative relationship between impulsivity/antisociality and ASO TE.

Based in part on the findings of Study 1, the ASO treatment model was modified to improve TE particularly with higher antisocial/impulsive ASO clients,

and with Indigenous ASO clients. The aim of Study 4 was to test for improvements in TE by comparing the Study 1 cohort ($n = 105$) against a second independent cohort ($n = 54$, mean age 15.44, $SD = 1.22$, 42.6% Indigenous). A two-way ANCOVA, controlling for impulsivity/antisociality, indicated significant improvements in TE for both Indigenous and Non-Indigenous ASOs. However, the Indigenous ASOs remained comparatively less engaged than their Non-Indigenous peers.

These findings are discussed in relation to previous research on TE with ASOs. Strengths and limitations of the present research are considered, and implications for multisystemic and clinical theory, treatment provision and prevention of sexual offending are discussed. Finally, a number of directions for future research are suggested.

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Declaration of Originality

I declare that this work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Please note that a modified version of Study 3 has been published in *Clinical Psychologist*, and modified versions of Studies 1 and 4 have been published in *Behavioral Sciences and the Law*.

Smallbone, S., Rayment-McHugh, S. Crissman, B., & Shumack, D. (2008). Treatment with youth who have committed sexual offences: Extending the reach of systemic interventions through collaborative partnerships. *Clinical Psychologist*, 12(3), 109-116.

Smallbone, S., Crissman, B., & Rayment-McHugh, S. (2009). Improving therapeutic engagement with adolescent sexual offenders. *Behavioural Sciences and the Law*, 27 (6), 862-877.

Signed:

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CHAPTER 1

Introduction to the Research

Background and Aims

This thesis examines therapeutic engagement (TE) of adolescent sexual offenders (ASOs) with the aim of identifying factors associated with poor TE and methods of improving TE in this population. Adolescents comprise approximately one-quarter (25.8%) of known sexual offenders and over one-third (35.6%) of known sex offenders against minors (Finkelhor et al 2009). Police statistics show that youths under 18 years were the identified perpetrators in 20% of all sexual offences in Queensland in 2006-2007 (Queensland Police Service, 2008). These numbers are likely to be an underestimation as incidents of sexual offending by adolescents may be underrepresented due to factors such as underreporting (Knight & Prentky, 1993; Vizard, Minck & Misch, 1995).

As with adult sexual offending, adolescent sexual offending has emotional costs for victims, offenders, their families and society, in addition to the financial costs of child welfare and criminal justice involvement and treatment (Prentky & Burgess, 1990). As part of a broader response to this population of offenders, specialised treatment programs for ASOs were developed, and there are some indications that these programs can be effective with regards to reducing rates of sexual recidivism (Walker, et al., 2004). However, difficulties in engaging clients in therapeutic treatment are a common problem. In general clinical treatment settings, average treatment non-completion rates of around 47% have been reported across child and adult samples (Wierzbicki & Pekarik, 1993). Disengagement from therapeutic treatment programs represents an inefficient use of resources in addition to

the experience of treatment failure being demoralising for both treating clinicians and clients (Robinson & Little, 1982). With regards to ASOs, failure to therapeutically engage in treatment programs may result in a number of additional negative consequences including breaches of statutory orders, increased court and service provision costs, and possibly detention.

Even when treatment program attendance is mandatory, problems with TE may still exist. For example, a client may remain in a treatment program but be psychologically detached from it and refuse to participate by skipping sessions or by not committing to the therapeutic process within sessions. Large scale studies of clinical populations have found that the extent to which the individual is involved in treatment can affect treatment outcomes. A recent meta-analysis of child and adolescent studies of clinical treatment found that youth participation and willingness to participate in treatment were moderately associated with treatment outcomes (Karver, Handelsman, Fields & Bickman, 2006). With regards to sexual offenders, failure to complete treatment has been associated with higher rates of recidivism in both juvenile (Hunter & Figueredo, 1999) and adult samples (Hanson & Bussiere, 1998). Furthermore, a meta-analysis of adult and adolescent recidivism studies found that sexual offenders who begin but do not complete treatment may even be at higher risk of reoffending than those who have received no treatment (Hanson & Bussiere, 1998). This finding is particularly concerning in light of the high rates of treatment non-completion in ASOs, which have been reported as ranging from 50-70% (Becker, 1990; Edwards et al., 2005; Hunter & Figueredo, 1999; Kraemer, Salisbury, & Spielman, 1998; Seabloom, Seabloom, Seabloom, Barron, & Hendrickson, 2003).

Despite the potentially increased risks associated with ASOs failing to complete treatment programs, very few studies to date have focused on factors that

may influence therapeutic engagement (TE) in this population. ASOs may be subject to a number of barriers to TE due to their developmental stage, and the requirements of treatment. For example, adolescents may be reliant on caregivers to assist them in recalling their appointments and providing transport to attend appointments. Furthermore, sexual offending treatment programs are often between one to three years in duration, which may exacerbate difficulties in treatment completion.

Moreover, the studies of ASO TE have used indicators of engagement such as program attendance or failure to complete treatment, which may not accurately represent the degree of client participation in mandated treatment programs. Given the proportion of sexual offences committed by adolescents and the impact of sexual offending on victims, it is vital to prevent treatment dropout and enhance TE in this population. The studies presented in this thesis aimed to examine TE in a population of ASOs undergoing specialised treatment. In the current thesis, TE is defined as a multifaceted construct encompassing a variety of aspects of the treatment relationship, and measurement of this construct may be a better reflection of the degree of participation in ASO clients mandated to treatment. The current chapter presents an overview of the research studies reported in this thesis, and an orientation to the thesis structure.

Research Overview

Given some evidence of low treatment completion rates, it appears that therapists often do a poor job of effectively engaging adolescents who sexually offend. An understanding of the factors associated with effective TE could contribute to improved treatment participation and retention in this population and thus potentially enhance treatment effectiveness. The theoretical premise underpinning

multisystemic models of treatment is that the youth's behaviour is influenced by their individual characteristics, as well as the systems (e.g. peers, family, school) within their local social ecology (e.g. Curtis, Ronan & Borduin, 2004). The current research examined a range of individual and systemic variables in relation to ASO TE. Research participants were ASOs undergoing specialised treatment in relation to sexual offences. The caregivers, caseworkers, and clinicians who were involved in the treatment of the ASO, were also included as research participants for selected studies. The current research was conducted under ethical clearance from Griffith University Ethics Committee (Protocols PSY/34/03 HEC and PSY/C1/05/HREC) and some aspects involving staff were obtained from quality assurance data from routine activities carried out by the service.

The identification of specific variables associated with poorer therapeutic engagement enables clinicians to tailor treatment interventions so as to improve the likelihood of successfully engaging all clients, including those for whom therapists have traditionally failed to engage, thereby potentially improving TE. Study 1 aimed to identify multisystemic predictors of TE in a sample of ASOs participating in a specialised treatment program. Putative predictor variables were selected based on research reviewed in the current thesis, and additional variables were included to represent the systems influencing the ASO and therefore potentially influencing their therapeutic engagement. Regression analysis identified individual variables, specifically, Indigenous status and impulsivity/antisociality, as unique predictors of TE in ASOs participating in a specialised treatment program. Initial correlational analysis found that peer relationships were also associated with ASO therapeutic engagement, however peer relationships were not found to be predictive of therapeutic engagement after accounting for shared variance with Indigenous status

and impulsivity/antisociality. Other systemic variables, including parenting quality and Youth Justice Office responsiveness, were not predictive of TE.

One of the key principles of multisystemic treatment models is that key stakeholders should be involved in the adolescent's treatment. It was proposed that the level of engagement of the youths' caregivers and Youth Justice Service caseworkers in the ASOs' treatment may have a more direct relationship on the ASOs' TE than the systemic variables examined in Study 1. Study 2 therefore aimed to examine the association between caregiver and caseworker TE and ASO TE. Study 2 also aimed to examine whether key stakeholders' perceptions of ASO TE were similar to the ASOs' own ratings of their TE. The study found that clinicians' and caseworkers' ratings of ASO TE were highly correlated with ASOs' own ratings of their TE. Caregiver and caseworker TE was not strongly correlated with ASO TE, however caregiver TE was strongly correlated with ASO progress towards treatment goals. As in Study 1, impulsivity/antisociality was also found to be associated with poorer TE in Study 2.

Study 3 investigated the role of collaborative treatment partners (CTPs) (identified professionals or community partners who may assist with aspects of treatment delivery) in ASO TE. Specifically, Study 3 examined whether CTP knowledge, skills and confidence could be improved through their participation in a collaborative multisystem treatment model. Study 3 also examined the relationship between the level of CTP knowledge, skills and confidence with regards to working with ASOs, and ASO TE. CTPs reported significant improvements in their knowledge, skills and confidence after working within the collaborative treatment model, however CTP knowledge, skills, and confidence was not related to ASO TE. Study 3 also provided further support for the negative relationship between impulsivity/antisociality and ASO TE.

Study 1 identified impulsivity/antisociality and Indigenous status as being predictive of poorer TE in ASOs. Study 4 investigated whether a modified treatment model aimed at improving TE with ASOs, particularly ASOs with higher impulsivity/antisociality, and Indigenous ASOs, could result in improved TE. Results showed significant improvements in TE with both indigenous and non-indigenous ASOs, although indigenous ASOs remained comparatively less engaged than their non-indigenous counterparts.

In sum, the four studies reported in this thesis will examine a range of variables in relation to TE within a multisystemic understanding of the ASO's offending behaviour. The current research will contribute to research regarding TE in ASO populations, but in addition, aspects of the research will enhance knowledge of factors that may improve TE in general clinical practice and difficult-to-engage populations. The findings of the current research may have direct clinical benefit to clinicians and clients through the identification of strategies or treatment models that may enhance ASO TE and potentially treatment outcome. The sequence of presentation of this research in the current thesis will now be outlined.

Thesis Structure

Chapter 1 provides a brief introduction to the thesis topic, an overview of the research, and an orientation to the thesis structure. Chapter 2 provides a description of the client group (ASOs) and the specialised ASO treatment program from which the current sample is sourced. The chapter also includes a brief description of specific issues that may influence treatment provision for ASOs. Specifically, the present treatment program employs a model of intervention which is based on multisystemic treatment principles and utilises collaborative treatment partnerships. A brief

description of each of these components will be presented. A proportion of ASO clients in the present sample identify as Indigenous, and therefore a brief description of the unique issues that affect this client group will be outlined. In Chapter 3 a definition of TE as it is used in these studies is outlined, and measurement issues with regard to TE are briefly addressed. Literature relating to TE and treatment dropout will then be reviewed in Chapter Four. As TE studies specifically relating to ASOs are sparse, literature relating to other relevant clinical and forensic populations has also been included. Each of the four studies will then be reported in detail in subsequent chapters. A final chapter will discuss the findings of the research in relation to the existing literature, limitations, implications, and suggested directions for future research.

CHAPTER 2

Context of the Research

This chapter aims to assist the reader in gaining an understanding of a range of contextual issues with regards to the current research. The chapter provides a description of the population under study, then briefly describes the specialised treatment service (Griffith Youth Forensic Service) from which the present samples were drawn. A proportion of the present samples identify as Australian Indigenous youth, and thus a brief summary of the unique issues that affect this client group will also be provided.

Adolescent Sexual Offenders

There has been increasing recognition over the past twenty years that adolescents are responsible for a considerable proportion of cases of rape and child sexual abuse (American Academy of Child and Adolescent Psychiatry, 1999). Adolescents comprise more than a quarter of known sexual offender (Finkelhor et al 2009). The consensus among clinical researchers is that adolescent sexual offenders (ASOs) are a heterogeneous population with diverse characteristics and treatment needs (Hunter, Hazelwood & Slesinger, 2000; Veneziano & Veneziano, 2002). ASOs vary with regard to the ages of their victims and whether offences involved physical or psychological coercion (Veneziano & Veneziano, 2002). The spectrum of behaviours involved range from non-contact sexual behaviours such as voyeurism, to varying degrees of sexual aggression involving direct sexual contact (American Academy of Child and Adolescent Psychiatry, 1999).

Despite the heterogeneity of this population, there are a number of factors that have been commonly found in the history of ASOs. These include poor social and interpersonal skills, social isolation, impulsivity, academic and school problems, family instability, family violence, abuse and neglect, and psychopathology (American Academy of Child and Adolescent Psychiatry, 1999; Veneziano & Veneziano, 2002). Additional factors which have been identified in some ASOs include neurological difficulties, and exposure to physical and/ or sexual abuse (Bunston, 2000; Knight & Prentky, 1993). Other youths who have been adjudicated for sexual offences may have no other mental health or delinquency issues. Notably, histories of other criminal activity are common in ASOs, with rates of previous non-sexual delinquent activity ranging from 50 to 86% (Knight & Prentky, 1993).

ASOs share many characteristics with the broader population of juvenile delinquents, which has led to the use of treatment models developed for juvenile delinquents, such as cognitive behavioural therapy (CBT) and multisystemic treatment (Veneziano & Veneziano, 2002). A meta-analysis of treatments for male ASOs (N = 644) identified that CBT (n = 45) showed moderate to large effects ($r = .39-.77$) with regards to improving outcomes (Walker et al., 2004). A meta-analysis of multisystemic treatment studies of adolescents with antisocial behaviour (N = 708) found a moderate effect ($d = .55$) with regard to improved outcomes (e.g. reduced behavioural problems and youth aggression) (Curtis, Ronan & Borduin, 2004). According to Cohen's standards for interpreting effect sizes (d), a d of equal to or greater than 0.80 is a large effect size, a d of equal to or greater than 0.50 but less than 0.80 is a medium effect size, and a d that is equal to or greater than 0.20 or less than 0.50 is a small effect size (Cohen, 1988). A treatment model based on multisystemic

principles of intervention is used at the Griffith Youth Forensic Service (GYFS), a specialist treatment program for ASOs.

Griffith Youth Forensic Service

All of the studies in this thesis utilise data from the staff and clients of the GYFS. GYFS is a joint initiative of the Griffith University Key Centre for Ethics, Law, Justice and Governance and the Queensland Department of Communities (Youth Justice Program). GYFS is funded by the Queensland Department of Communities, and receives in-kind support from Griffith University. GYFS began operation in 2001, providing a state-wide service to young people (10-17 years) who have appeared in Queensland courts and have either pleaded guilty or been found guilty of sexual offences. GYFS routinely provides a range of services including: clinical assessment of ASOs, provision of ASO presentence and pretreatment reports, training of Department of Communities staff, consultancy, evaluation and research, and provision of a range of individualised multisystemic approaches to ASOs and their families. Treatment approaches may include CBT, motivational interviewing and relapse prevention, within a multisystemic treatment framework.

Referrals received by GYFS are briefly assessed for risk/needs and acceptance of referrals with a higher number of risk factors is prioritised. Referrals from regional and remote areas are also prioritized because alternative services are rarely available outside major cities. GYFS has accepted 280 referrals since its inception in 2001. Of these referrals, 85% have involved youth from regional, rural and remote locations, and 35% have involved indigenous youth and their families. Once accepted, the client undergoes a comprehensive assessment, involving interview and questionnaires, taking approximately 3-4 sessions. Based on this assessment, individualised treatment

goals are established and formal therapeutic treatment commences. Treatment length varies dependent on factors such as the number of treatment goals, the length of the young person's sentence, and the capacity and motivation of the ASO to achieve their treatment goals. For most clients, attendance at GYFS sessions is an extra condition of their Youth Justice statutory order, and as such they are subject to the Juvenile Justice Act 1992, and non-attendance may potentially result in breach action with potential consequences including extension of order or resentencing.

Despite the potential consequences for non-attendance, problems with engaging the clients in therapeutic treatment may remain. The studies described in this thesis were developed as a result of a concern expressed by the GYFS staff that some of the adolescents in the program were particularly difficult to engage in treatment. Specifically, clinicians identified problems with attendance at sessions and failure to engage in the therapeutic process during the sessions. Rayment, Shumack, Ross, Smith and Kruger (2006) identified a number of challenges to treatment provision which result from the GYFS metropolitan-based service providing treatment to regional, rural and remote regions of Queensland, including knowledge deficits regarding local contextual issues, local resources and networks, and limited ability to provide support between sessions or during crisis.

In part to overcome these challenges, GYFS developed a Collaborative Multisystem Treatment Model (CMTM). The aim of GYFS in modifying their model was to enhance their service provision to clients in rural and remote areas, to include services for high risk offenders in community settings, and to provide services that were appropriate to the particular needs and circumstances of indigenous youth and their families.

The CMTM comprises two key components: the multisystem team and collaborative treatment partners (CTPs). The GYFS clinician is responsible and accountable for the treatment of the ASO. To enhance treatment of the ASO however, a multisystem team is developed for each client. The multisystem team comprises key stakeholders within the young person's local community (e.g. Department of Communities Youth Justice caseworkers, family members, cultural representatives, school counsellors, youth workers). The role of the multisystem team is to provide knowledge of local contextual issues and resources that may inform and enhance treatment, to ensure that the prescribed treatment interventions are culturally and ecologically valid, and to supplement GYFS therapeutic interventions (Rayment et al., 2006). Multisystem team meetings are conducted every four to six weeks to facilitate the treatment process.

The second component of the CMTM is the collaborative treatment partner (CTP) model. GYFS staff engage a local CTP (usually the ASO's Department of Communities Youth Justice caseworker, although other collaborations may occur, e.g. Indigenous representative, other professionals) to facilitate the achievement of the specific treatment goals addressing the adolescent's sexual offending behaviour. Typical treatment goals addressed by the collaborative treatment partner include consolidating learning from GYFS individual work, and focusing on systemic interventions (e.g. engagement in structured activities with prosocial peers, and engagement in education and training).

The degree of therapeutic intervention directly delivered by the GYFS clinician or the CTP varies according to a continuum of collaboration. The choice of collaborative model within the continuum is contingent upon assessed level of risk and need and

level of local capacity of alternative treatment providers. Rayment et al., (2006) describe the three models within the continuum as follows:

1. *Treatment Reinforcement*: the GYFS clinician provides primary treatment to the ASO and their family. CTPs assist with homework tasks and other related activities to support, reinforce and enhance treatment.
2. *Co-therapy*: the GYFS clinician and CTP both provide treatment for the ASO. This model may take the form of co-therapy sessions, or different team members may focus on distinct treatment goals.
3. *Consultation*: the CTP provides treatment for the ASO and their family. The GYFS clinician provides case consultation and resources.

Thus the CMTM has been designed to overcome a number of the challenges of providing treatment from outside the local area of the ASO. Incorporation of key local stakeholders into the multisystem team ensures that the individualised treatment plans reflect local ecology and cultural issues. Recruitment of a CTP into the therapeutic team is intended to overcome the issue of infrequent visits by GYFS clinicians as the CTP pursues treatment goals between visits, thus providing greater treatment continuity and expediency. Finally, incorporation of the local community members into the treatment process via the multisystem team is intended to build the capacity of the local community to respond to broader sexual abuse issues (e.g. identifying rates and prevalence of sexual abuse within communities, increasing the capacity for the community and services to identify risk of sexual abuse and engage in protective interventions).

As the CTP is thought to be integral to the success of treatment interventions (particularly in rural and remote areas), GYFS uses a number of strategies to ensure that the collaborative treatment partner is able to facilitate the provision of high-

quality interventions. CTPs are selected on a case by case basis following an assessment of the young person's offence behaviours and level of risk. GYFS then works to build the knowledge, skills and confidence of the CTP to work with ASOs, which occurs in two main ways. First, GYFS provides formal training workshops to all professionals and para-professionals who may later become CTPs. Second, GYFS provides clear advice and specific direction to CTPs about strategies for addressing treatment goals with clients. Regular (4-6 weeks) formal discussions with CTPs are used to review the client's treatment and plan future session. GYFS provides additional supervision and support for the CTP as required by phone, email or in-person. GYFS also provides information regarding current thinking and research in the field (e.g. etiological theories of sexual offending behaviour), modelling of specific therapeutic techniques (e.g. through co-therapy arrangements), and professional resources to support their interventions (e.g. worksheets, books, DVDs).

The empirical studies presented in this thesis aim to identify factors associated with poor TE, to examine some of the elements associated with the multisystemic treatment model that may be associated with improved TE, and to test for improvements in TE. Study One was conducted prior to the introduction of the CMTM when treatment was primarily conducted solely by GYFS clinicians. Studies 2, 3 and 4 were conducted following the implementation of the CMTM.

In summary, the GYFS CMTM is based on multisystemic treatment principles, and uses collaborative treatment partnerships to assist in aspects of treatment delivery to ASOs and their families. A brief description of multisystemic treatment models will now be provided, and some evidence for collaborative treatment models in enhancing service delivery will be presented. It is also notable

that approximately one third of GYFS ASO clients identify as indigenous. There a number of unique issues in relation to this population and these will also be outlined.

Multisystemic Treatment Models

There has been increasing recognition that adolescent behaviour problems occur within the wider context of the youth's natural social ecology. The multisystemic approach views the youth as being surrounded by a network of interconnecting systems that encompass individual, family and extrafamilial (e.g. peer, school, neighbourhood) factors, and recognises that intervention is often necessary in a combination of these systems (Henggeler & Sheidow, 2003). A number of multisystemic treatment models have been developed for intervention with adolescent antisocial behaviour although they have been adapted for use in other populations such as youths with serious emotional disturbance and their families (Henggeler, Schoenwald, Rowland & Cunningham, 2002), and ASOs (Borduin, Henggeler, Blaske & Stein, 1990). Treatment models which target multiple systems include Multisystemic Treatment (MST; Curtis, Ronan & Borduin, 2004; Henggeler et al., 1997), Brief Strategic Family Therapy (BSFT; Coatsworth et al., 2001; Szapocznik, 1988) and Multidimensional Family Therapy (MDFT; Dakof et al., 2001; Liddle et al., 2001, 2004). A meta-analysis of adolescents and their families found that multisystemic treatment was effective in reducing emotional and behavioural problems in individual family members, improving family relations, decreasing youth aggression toward peers, decreasing involvement with deviant peers, and reducing youth criminality (Curtis, Ronan & Borduin, 2004).

Multisystemic treatment interventions may include strategic family therapy, structural family therapy, behavioural parent training, and cognitive behaviour

therapies (Henggeler & Sheidow, 2003). Goals of treatment may include enhancing the caregiver's capacity to monitor their adolescent's whereabouts and introduce positive consequences or sanctions for adolescent behaviours; and decreasing the youth's involvement with delinquent peers and increase involvement with prosocial peers. Thus, in multisystemic treatment models, caregivers are seen as integral to achieving desired outcomes, and interventions are typically focused on the family and their interface with key social systems.

Generally, multisystemic treatment models aim to provide services in locations and times convenient to the clients in order to overcome barriers to service access (Henggeler & Sheidow, 2003). In many of the models, clinicians assume responsibility for treatment engagement and the achievement of clinical outcomes. Henggeler and Sheidow (2003) argue that the aforementioned factors result in the MST model being very effective at engaging families in treatment and removing barriers to service access (e.g. Henggeler, Pickrel, Brondino & Crouch, 1996). Engaging young people effectively in treatment, or therapeutic engagement, is a key construct in the current research.

In summary, multisystemic treatment models target multiple aspects of the adolescent's environment with the aim of producing therapeutic change, and treatment generally involves key stakeholders in the young person's life (e.g. caregivers). In many of the models, clinicians are given responsibility for therapeutic change in the client and treatment is designed to be convenient to the client (e.g. suitable appointment scheduling and therapy location). Research indicates that multisystemic models may be effective in engaging adolescents and their families in therapeutic treatment.

Collaborative Treatment Partnerships

Due to the unique nature of the GYFS model, direct support for its effectiveness is limited. However, models exist in related fields which have used collaborative treatment models or “non-traditional” treatment providers to enhance service delivery and outcomes. Specifically, a number of studies have examined whether training non-traditional treatment providers to execute aspects of treatment delivery is effective in increasing access to services and/or improving outcomes. Research evaluating these models will now be reviewed.

One study examined whether local mental health case managers ($N = 32$: 61% psychiatric nurses, 22% social workers, 13% psychologists) could be trained to provide focused psychological strategies thereby increasing access to mental health treatment in rural areas (Donoghue et al., 2004). Specifically, the study investigated whether an education and training program improved self-reported knowledge, attitudes, practice and satisfaction of local mental health caseworkers. Caseworkers completed a self-report questionnaire prior to the program and at completion of the training ($n = 20$). The study reported improvements in caseworker knowledge of CBT interventions, attitudes, practice and satisfaction following completion of the education and training program; however this was not assessed statistically. Although case managers reported improvements in CBT skills, they reported a lack of confidence and competence to translate the skills into practice. Case managers also cited lack of management support, workload and client crisis as barriers to attending education and training sessions. This study indicates that the complexities of rural mental health service delivery may require a more comprehensive approach to improving local skill levels than a single training program.

A second study also examined whether non-traditional treatment providers could be trained in psychological techniques to enhance service provision. Kerfoot, Harrington, Harrington, Rogers and Verduyn (2004) studied whether trained social workers could provide CBT to adolescents with depression. Social workers were randomised to either CBT training ($N = 25$) or standard social work ($N = 22$) and provided treatment to an identified adolescent with depressive symptomatology. Adolescents assigned to CBT ($N = 26$) had a mean age of 13.7 ($SD = 2.2$); 48% had conduct disorder, 58% had depressive symptoms or minor depression, and 41% had major depression. Adolescents assigned to routine social work ($N = 20$) had a mean age of 14.1 ($SD = 1.6$) and a higher rate of conduct disorder (78%), 48% had depressive symptoms or minor depression and 52% had major depression. Social workers completed a 3-day training course which resulted in significant increases in social worker's self-reported confidence, knowledge, and a reduction in perceptions of the need to seek help or advice from others. The CBT intervention comprised eight sessions conducted over eight weeks, with sessions being tailored to the needs of the young person. Rates of therapy completion by adolescents were low with only 13 of the 29 adolescents attending 4 or more of the 8 scheduled sessions. There were no significant differences in depressive symptoms at post treatment between adolescents who had been allocated to CBT treatment versus those who had received treatment as usual. A second analysis including only those adolescents who received four or more CBT sessions compared with controls was also non-significant. Both treatment (77%) and usual care (80%) groups had residual depressive symptoms or disorder posttreatment. It is difficult to ascertain the effectiveness of the approach due to low sample sizes, high rates of conduct disorder and poor attendance at sessions by

adolescents; however these issues are most likely reflective of real world intervention in a social work setting.

A number of further studies have also examined the success of training “non-traditional” mental health providers (e.g. nurses) to deliver evidence-based psychological interventions. Early studies indicated that mental health professionals (predominantly nurses) could be successfully trained to deliver psychological interventions such as family interventions resulting in improved outcomes for patients with schizophrenia and their caregivers (Brooker et al., 1994; Lancashire, Haddock, Tarrier, & Baguley, 1997).

Brooker et al. (1994) studied the effectiveness of community psychiatric nurses trained to provide psychosocial interventions for families with schizophrenia. Trainee nurses ($N = 8$) provided weekly sessions on psychosocial interventions to 34 families who were followed up for twelve months. Control families also had weekly sessions but without psychosocial interventions. Client psychiatric symptoms and social functioning were assessed at baseline, 6 months and 12 months. Patients who received the psychosocial interventions showed significant improvements on both psychiatric symptoms and social functioning.

Lancashire et al. (1997) examined the effectiveness of training psychiatric nurses in a broader range of psychosocial interventions in order to meet the demand for aftercare services in patients with schizophrenia. Nurses in the United Kingdom ($N = 12$, selected from 105 applicants) attended a nine-month pilot training course in psychosocial interventions. The training course consisted of one day per week attending formal teaching and supervision of their clinical work and one day per week undertaking psychosocial interventions with clients selected from their current caseloads. Clients who received the psychosocial intervention showed significant

improvements in both psychiatric symptoms and social functioning over clients who had not received the intervention at 12 month followup ($N = 27$). Lancashire et al.'s study indicated preliminary support for the effectiveness of training of non-traditional staff in improving access to psychological services and improving outcomes for clients.

However, when follow-up studies of the mental health professionals have been conducted, implementation of psychological interventions by these professionals was minimal (e.g. Kavanaugh et al., 1993). Mairs and Bradshaw (2005) reviewed six studies of mental health professionals who had received training in conducting psychological interventions, and examined rates of implementation of the interventions and barriers to implementation. Training in psychological interventions ranged from behavioural and systemic family therapies to more eclectic models of treatment, and training courses varied in length from five days to three years. Across all six studies rates of implementation of the psychological interventions were low, with most of the psychological interventions being implemented by a few mental health professionals. The mental health professionals most frequently cited difficulties in recruiting and engaging families as a barrier to implementation. Patient outcome was not evaluated in the studies in Mairs and Bradshaw's review. Thus, although research indicates that mental health professionals can be trained to provide psychological treatment interventions, professionals failed to implement treatment interventions following completion of the training program.

In summary, there is some evidence to indicate that training non-traditional treatment providers may be effective in improving client access to treatment and client outcomes. However, it appears that confidence and implementation of

interventions by collaborative treatment partners may be less successful if not supported over the longer term.

Indigenous Populations

Given that approximately one third of GYFS clients are of Indigenous background, the unique issues that may affect this population in relation to TE need to be considered. Indigenous people in Australia comprise two distinct racial groups – Aboriginal people and Torres Strait Islanders. Indigenous Australians comprise less than 3% of the Australian population, however Indigenous ASOs comprise approximately one third of GYFS clients. This finding is consistent with the over-representation of Indigenous Australians in the legal system. For example, Western Australian data on police charges which showed that Aboriginals made up 40% of all persons charged with “offences against the person” (which included sexual assaults) (Harding, Broadhurst, Ferrante and Loh, 1995). High rates of sexual violence and abuse particularly in remote communities, have been reported in a number of Australian government inquiries and reports (Robertson, 2000; Wild & Anderson, 2007). For example, in the Northern Territory, between 2002-03 and 2005-06, Indigenous children were consistently over-represented as the subject of a sexual abuse notification (average of 53% of cases) (Wild & Anderson, 2007).

Indigenous Australians are more likely to experience socioeconomic disadvantage, low levels of education, and substance abuse (Jones, Masters, Griffiths & Moulday, 2002), which have all been associated with failure to complete treatment in adult Non-Indigenous clinical samples (Garfield, 1994; Wiersbicki & Pekarik, 1993) and child and adolescent therapy samples (e.g. Nock & Ferriter, 2005). Similar problems in TE with Indigenous Australians have been reported by Cull and Wehner

(1998) in adult samples of Indigenous sexual offenders in Western Australia. Stathis et al. (2007) also reported difficulties in engaging Indigenous populations with a rural mental health service. Literature on Australian Indigenous populations has highlighted the numerous issues that may complicate TE with Indigenous clients, including mistrust of government, justice and welfare agencies, difficulties in using psychometric testing procedures, illiteracy, issues of shame, the degree of adoption of traditional or Western culture, and lack of therapist knowledge about valid culturally specific practices, particularly concerning sex (e.g. adolescent male initiation practices might be considered sexually inappropriate to non-Aboriginal cultures) (Cull & Wehner, 1998; Jones et al., 2002).

An additional factor that may exacerbate difficulties in TE with Indigenous ASOs is the remote locality of Indigenous clients. Most of the identified Aboriginal communities in Queensland are located in the Cape York Peninsula region (far North Queensland). In this region there are 17 Indigenous communities each with numerous distinct cultures and languages (both within and between communities). The Torres Strait Islands are a group of over 100 small islands located in the Torres Strait, the waterway separating Australia's Cape York Peninsula and New Guinea. Working within these remote regions requires significant travel, as individual communities are spread across vast distances. Air travel is standard, with visits to some communities requiring multiple flights, sometimes lengthy travel times, and on occasions multiple forms of air, water and road transport.

Mals, Howells, Day and Hall (2000) have proposed a number of strategies to overcome cultural barriers to TE with Indigenous offenders. These strategies include engaging Indigenous counsellors and support workers, seeking feedback from cultural representatives on program format and content, cultural awareness training, seeking

endorsement of treatment programs from respected Indigenous representatives and consulting with cultural advisers for the purposes of better informing clinical assessment case formulation and treatment planning. Studies that have implemented programs that have incorporated some of these strategies have shown some improvements in program participation in adult Indigenous ASOs. Cull and Wehner (1998) designed culturally specific programs delivered from two treatment venues away from the main metropolitan area solely for Indigenous clients, with at least one of the program facilitators being Indigenous. Whilst not formally evaluated engagement rates of convicted Indigenous offenders improved from 30% in the old model, to 68% with the incorporation of the culturally specific model. Stathis et al. (2007) also found that the engagement of an Indigenous health worker improved TE (as assessed by referrals to and receiving of mental health services) within a Youth Detention Centre.

In summary, there are a number of factors unique to Indigenous populations that may pose challenges to therapeutic engagement. These factors include unique cultural needs, negative social problems within communities, and remote locality. However, addressing cultural issues in treatment planning and intervention with indigenous clients has shown some promise in enhancing therapeutic engagement.

Chapter Summary

Adolescents account for a significant proportion of sexual offences and failure to complete treatment programs has been associated with sexual offence recidivism. The current thesis examines TE within an ASO population. ASOs are a heterogeneous population, however characteristics common to this group include poor social and interpersonal skills, prior delinquent behaviour, impulsivity, academic and school

problems, family instability, family violence, abuse and neglect and psychopathology. In addition, ASOs share many characteristics with the broader population of juvenile delinquents which has led to the use of treatment models developed for juvenile delinquents being used with ASOs. There has been increasing recognition of the need to intervene in multiple systems when treating juveniles with behavioural problems. The current thesis examines TE in ASOs who are receiving therapeutic treatment within a multisystemic treatment model. The following chapter defines TE as it is conceptualised within this thesis, and discusses a number of considerations in the measurement of TE.

CHAPTER 3.

Definition and Measurement of Therapeutic Engagement.

In this chapter, the construct of therapeutic engagement (TE) is defined, and a discussion of key conceptual and methodological issues in relation to the measurement of TE is presented. Specific issues in relation to TE in adolescent sexual offenders (ASOs) are discussed, and the importance of investigating TE in this population is summarised.

Definition of Therapeutic Engagement

A number of definitions of TE have been proposed in the clinical literature. These definitions will be reviewed, and then TE as it is defined in the current study will be outlined. In its simplest form, TE has been considered to be the responsibility of the client and has therefore been defined as the client's commitment to treatment and motivation to change (Battjes, Onken & Delany, 1999). However, this definition does not capture the therapist's experience of engagement. Oetzel and Scherer (2003) define TE as the process whereby, through reciprocal interaction, the therapist and the client both have a responsibility for establishing effective rapport.

There is also disagreement in the literature regarding the relationship of TE to the construct of therapeutic alliance. Some authors consider TE to be equivalent or related to the construct of therapeutic alliance (e.g. Derisley & Reynolds, 2000). Other authors distinguish TE from the therapeutic alliance, with the former representing the initiation of a therapeutic relationship, while the therapeutic alliance itself is developed once engagement matures into an emotional involvement between therapist and clients (Friedlander, Heatherington, Johnson & Skowron, 1994; Horvath, 2001;

Ogrodniczuk, Piper, Joyce, & McCallum, 2000). TE may also be considered as a more inclusive construct relating to, for example, assertive outreach programs that perform functions for the client outside of the therapeutic relationship.

Perhaps the best definition is one that captures the complex nature of TE, and the participation of both the therapist and the client in this process. Joe, Simpson, and Broome (1999) conceptualise engagement as the degree to which a client actively participates in the treatment process, suggesting both an objective aspect representing patient compliance and session content, and a subjective aspect that reflects cognitive involvement and satisfaction with the process by both the client and therapist. The definition used in the current study is that TE is a complex construct which involves a number of facets, such as attendance, client-therapist interaction, communication, the client's perceived usefulness of treatment and the client's agreement with and involvement in treatment (Hall, Meaden, Smith & Jones, 2001). It is considered that TE is an ongoing process which is necessary to develop and keep a positive therapeutic alliance (Staudt, 2007).

For the purposes of the current thesis, it is also important to provide a definition of therapeutic disengagement. Conceptually, disengaged clients can be of two types: clients who attend sessions, yet who do not actively participate in sessions and who are cognitively detached from sessions; and clients who become disengaged to the extent that they prematurely terminate from treatment or "drop out". A dropout from treatment is defined as a client who has been accepted for treatment, who has attended at least one session, and who discontinues treatment on his or her own initiative by failing to attend any future arranged sessions with the therapist (Garfield, 1986).

Measurement of Therapeutic Engagement

For the most part, studies have equated TE with attendance or treatment dropout (Simpson, Joe, Rowan-Szal & Greener, 1995). Some studies have simply compared differential attendance rates across conditions (e.g. Szapocnik et al., 1988); others have used participation in a minimum number of sessions, arguing that one month was the minimum length of treatment necessary to judge whether TE had occurred (Dakof, Tejada & Liddle, 2001, Elkin et al., 1999). This method of calculating engagement however fails to account for variations in the length of treatment deemed necessary by the therapist and client. For example, one client may achieve significant improvement after relatively few sessions and therapy may be terminated by mutual agreement of the client and therapist, whilst another client may have attended a greater number of sessions but made fewer treatment gains as a result of their lack of active participation in sessions. Other authors have used a more global measure of engagement, usually completed by the therapist or an observer. For example, Faw, Hogue, Johnson, Diamond, and Liddle (2005) used a single-item rated on a seven point scale ranging from 1 (not at all) to 7 (extremely), which asked “How receptive and/or engaged was the client during the session?” Other global rating systems appear to use the terms engagement and alliance interchangeably (e.g. Sexton, Littauer, Sexton & Tommeras, 2005).

Broome, Simpson, and Joe (1999) argue that there are a number of important indicators of TE. Specifically, session attendance may reflect engagement in project protocols and amount of contact with staff, whilst cognitive indicators of therapeutic involvement are represented by perceptual measures such as rapport with counselling staff. Broome et al. (1999) also argue that confidence in, and commitment to,

treatment are valid indices of therapeutic involvement, and have developed measures that assess patient involvement specifically in drug treatment settings.

Whilst there are a number of existing measures that aim to quantify the therapeutic relationship (e.g. Working Alliance Inventory, Horvath, 1981; Horvath & Greenburg, 1986, 1989), alliance measures have typically not been designed to address the specific issues involved in engagement with a service that has an outreach function, such as GYFS (Gillespie, Smith, Meaden, Jones, & Wane, 2004). The first validated instrument designed to assess engagement with mental health services was developed by Hall, Meaden, Smith, and Jones (2001), and the measure has since been used in studies of engagement with assertive outreach teams (e.g. Gillespie et al., 2004; Hall, Smith, Meaden, & Jones, 2001; Meaden, Nithsdale, Rose, Smith & Jones, 2004).

The Engagement Measure developed by Hall et al. (2001) is consistent with the definition of TE as a multi-faceted construct and hence this has been the preferred measure used in the studies presented in this thesis (one study also utilised a single-item global measure of engagement to enhance completion rates by clinicians). The psychometric properties of Hall et al.'s Engagement Measure are described in detail in the "Measures" section of Study One.

Timing of Measurement

There has been some research to suggest that the timing of administration of therapeutic relationship measures may influence reporting validity: the rating of therapeutic relationship may differ dependent on when the measures is administered in the course of therapy (early therapeutic sessions versus late in treatment). Although research specifically examining measurement of TE is sparse, research with regards

the measurement of therapeutic alliance has found varying results with regards to the importance of timing of measure completion. Horvath and Symonds' (1991) meta-analysis of therapeutic alliance in adults found no consistent effect with regards to timing of the measurement with regards to therapeutic outcome. A meta-analysis of adult samples by Martin et al. (2000) found that the relationship between alliance and outcome was not influenced by the timing of alliance rating. However a meta-analysis of relationship variables in child and adolescent therapy found that timing of measurement (early vs. late in treatment) was significant, with the therapeutic relationship being measured late in treatment showing a stronger association with treatment outcome than when the measures were completed early in the course of treatment (Shirk & Karver, 2003). Consequently, measures in the current thesis were administered once the client was well-established in treatment.

Therapeutic Engagement with Adolescent Sexual Offenders

Research on both adult and adolescent sexual offenders has found that clients who begin but fail to complete treatment recidivate at a higher rate than sexual offenders who never entered treatment at all (Hanson & Bussiere, 1998; Hunter & Figueredo, 1999). Although the process by which treatment disengagement produces these negative outcomes with ASOs is unknown, it is probable that engaging clients in treatment to ensure ASO retention in treatment may prevent some of the negative effects of treatment dropout.

Research with clinical populations of children and adolescents has found that the degree to which the client is willing to participate and actually participates in treatment is influential on therapeutic outcome. Karver et al. (2006) conducted a meta-analysis of therapeutic relationship variables in child and adolescent treatment

outcomes. Among the best predictors of youth therapeutic outcome were variables related to TE. Specifically, variables predictive of outcome included youth willingness to participate in treatment, parent willingness to participate in treatment, youth participation in treatment and parent participation in treatment. Furthermore, TE is essential to the development of therapeutic alliance. In clinical studies of adults, therapeutic alliance is modestly ($r_w = .22$) but consistently predictive of therapeutic outcome (Horvath & Symonds, 1991; Martin et al., 2000). In sum, improving TE in ASOs may positively affect achievement of treatment outcomes.

Notably however, studies of TE with ASOs to date have used attendance or treatment non-completion as indicators of the ASO's level of therapeutic engagement. However, attendance or program completion may not reflect the degree of ASO TE in mandated client groups as clients may be attending therapeutic programs to comply with statutory orders yet fail to actively participate in sessions. This thesis therefore specifically aims to assess ASO TE in treatment and uses a measure specifically designed to assess the multifaceted construct of TE.

Chapter Summary

TE is a multifaceted construct which includes many aspects of the treatment process. TE is considered to be necessary to establish therapeutic alliance, and is an ongoing process throughout the therapeutic relationship. The Engagement Measure (Hall et al., 2001), which accounts for the multifaceted construct of TE, was therefore used in three of the four studies in the current thesis. For the remaining study, a global rating of TE was used. The current thesis aims improve on previous research with ASOs by using a measure specifically designed to assess TE rather than relying on indicators such attendance or treatment dropout which may not accurately reflect TE

with clients in mandated treatment settings. Research indicates that the timing of administration of therapeutic relationship measures in child and adolescent samples may be more predictive of outcomes when administered later in treatment. Finally, TE is of import in ensuring client retention and possibly improving treatment outcomes. The following review of literature in clinical and forensic populations examines in more detail some of the factors that may influence TE.

CHAPTER 4

Factors that influence Therapeutic Engagement

Few studies have specifically addressed factors associated with therapeutic engagement (TE) and research that has done so predominantly involves clinical samples or samples of non-sexual offenders (Kraemer et al., 1998). Thus, in order to determine which variables may influence TE in adolescent sexual offenders (ASOs), studies examining TE in other populations will first be reviewed. Specifically, literature relating to TE in general clinical populations, clinical child and family populations, populations of juvenile offenders and ASOs will be reviewed. As most of the literature relating to TE has measured engagement through attendance or treatment retention, much of the literature reviewed refers to treatment dropout. The studies reviewed below have mainly examined individual factors in relation to client TE, although the influences of a number of systemic variables are also identified.

Studies of Therapeutic Engagement in Clinical Treatment

With regards to clinical treatment populations, a number of authors have reviewed studies of TE. The findings of these reviews will be examined separately, beginning with the earliest literature review published in 1975, by Baekland and Lundwall.

An early review of the literature pertaining to treatment dropout in general clinical populations was conducted by Baekland and Lundwall (1975). Baekland and Lundwell addressed multiple clinical populations, however only the findings in relation to adult clinical therapeutic studies, and child and adolescent studies will be summarised in the current review. It should be noted however, that the issues relating

to children and adolescents may differ markedly as a result of developmental changes that may take place during this time.

With regards to adult clinical therapeutic samples, most of the research in Baekland and Lundwall's review studied individual variables (demographic, symptomatic, personality) rather than systemic factors or factors external to the individual. Individual factors identified as being related to TE in Baekland and Lundwall's review included demographic variables, psychiatric diagnosis and psychological variables. Demographic variables found to be associated with treatment dropout were age, female gender, being unaffiliated (limited relationships and nomadic) and socioeconomic status. The relationship between age and treatment dropout varied dependent on the length of the therapy, and socioeconomic status was only predictive of treatment dropout in psychoanalytically orientated psychotherapy. Psychiatric diagnoses that were associated with treatment dropout were low levels of anxiety and/or depression, paranoid symptoms, sociopathic features (e.g. aggressive behaviour, legal trouble, or hostility to authorities), and alcoholism. However not all studies which examined psychiatric diagnosis found a significant relationship with treatment duration. Thus a number of individual factors related to demographic status or psychiatric well-being have been associated with difficulties in TE.

Baekland and Lundwall's review identified a number of psychological variables associated with treatment dropout including poor motivation, less anxiety and depression, fewer feelings of inadequacy and inferiority, less likely to have had previous treatment, less likely to be self-referred and less "psychologically minded." Psychological mindedness refers to "the patient's ability to recognise and admit psychological and interpersonal problems, to see himself in psychological terms, to use or accept the use of psychological constructs, or at least imagine psychological

causes of his symptoms or behaviour” (Baekland & Lundwall, p. 756). A few studies also indicated that patients who dropped out of treatment were more likely to have a significant other with a personality disturbance. However, at the time of Baekland and Lundwall’s review, few studies had examined the role of the family in client termination from therapy.

A number of variables related to the therapeutic process were found to be related to poor TE in Baekland and Lundwall’s review. Delay in assigning the client to a therapist, therapist dislike of/disinterest in the client, and therapist-client discrepancies in expectations of therapy were associated with treatment dropout. The therapist’s level of experience or expectations in relation to client outcome were found to be positively associated with treatment retention. Some studies also indicated that the gender of the therapist may influence TE, although this is a complex relationship. One systemic variable identified as being associated with higher treatment dropout was institutional (rather than private/self) referrals.

In summary, Baekland and Lundwall’s (1975) review of studies of adult clinical samples indicated that the following individual factors were associated with treatment dropout: being younger than 30 years; lower levels of anxiety, depression, and self-esteem problems; institutionally referred; possibly have lower SES; being unaffiliated; and alcoholism. In addition, there was some evidence that psychiatric diagnosis may influence treatment dropout, as well as poor motivation, being less psychologically minded, and delay in being assigned a therapist, and possibly having a significant other with a personality disturbance. Therapist factors which were associated with patient dropout were dislike or disinterest in the patient, and discrepant client-therapist expectations of treatment, whilst having a positive therapist-client relationship was associated with treatment retention. Few systemic

factors outside of the client and therapeutic relationship appear to have been examined at the time of Baekland and Lundwall's review.

With regard to children and adolescents in treatment, Baekland and Lundwall (1975) found that 40% of the studies reviewed failed to find significant differences between dropouts and those that remained in therapy. Similarly to studies of adult patients, the parent of the child who drops out of therapy is more likely to be less psychologically minded, institutionally referred, and have lower socioeconomic status. Children who dropped out of therapy were more likely to have developmental difficulties, unusual behaviour and non-specific symptoms, and to have been truant from school.

Garfield's (1994) review of adult clinical studies examined individual and therapeutic variables related to continuation in therapy, that is, patients who begin psychotherapy but who terminate participation and drop out of therapy early. According to Garfield's review, between 63% and 70% of clients who began therapy terminated before the tenth session. Early termination appeared to be exacerbated in settings where patients were of low socioeconomic status. Garfield argued that the evidence indicates that most clients remain in therapy for relatively few interviews.

Garfield (1994) reviewed studies examining individual demographic variables and their influence on treatment attendance and dropout. In general, the studies found a relationship between socioeconomic status and length of stay in psychotherapy. With regard to gender, most of the studies reviewed reported no significant differences with regard to premature termination. Garfield also concluded that age does not appear to be an important predictor of continuation in therapy with the majority of studies reviewed finding no significant relationship. Generally, no consistent relationship was found between specific psychiatric diagnosis and dropout

in studies of outpatient psychotherapy. However, premature termination was found to be associated with having psychiatric diagnosis generally. Studies of race and premature termination were found to be inconclusive, partially due to the fact that socioeconomic status had frequently not been accounted for in determining the effects of race.

Garfield's review also identified a number of variables related to the therapeutic relationship which influenced TE. Client-therapist discrepancies in expectations with regards to treatment were found to be predictive of therapy discontinuation (e.g. treatment length or clients expecting passive cooperation). As in Baekland and Lundwall's review (1975), variables related to the therapeutic relationship were also found to be related to TE. Positive feelings toward the client by the therapist, and the feelings of the client towards the therapist (confidence, satisfaction, trust, respect) were associated with client retention in treatment. Therapist demographic variables (sex, age, profession, experience or personal therapy) and continuance were not significant.

In summary, with regard to individual and therapeutic variables, research frequently shows a relationship between socioeconomic status and retention in clinical treatment. Garfield (1994) concluded from the studies reviewed that age, sex, and psychiatric diagnosis did not have a clear relationship with length of stay. Studies also indicated that race may affect length of stay in therapy, however studies have been limited as most did not partial out the effects of socioeconomic status. Garfield's (1994) review also indicated that client expectations with regard to treatment and number of sessions affect treatment dropout, whilst positive perceptions of the therapist toward the client, and of the client toward the therapist, positively influenced treatment retention.

Wierzbicki and Pekarik (1993) conducted a meta-analysis of 125 studies examining the rates of premature termination from therapy. The authors noted that the definition of what comprises “drop-out” has varied among the literature between termination by failure to attend a scheduled treatment session; therapist judgement; and number of sessions attended. Wierzbicki and Pekarik’s study is an improvement over previous research in the area (e.g. Baekeland & Lundwall, 1975; Garfield, 1994) as it examines differing definitions of dropout as distinct groups, rather than as all types of dropout being equal as previous research had done. In addition, they distinguished between adult, child and mixed samples; in response to previous research (Pekarik, 1991; Pekarik & Stephenson, 1988) indicating that adults and children differ with regard to dropout rates and factors that affect dropout. The meta-analysis also examined therapist variables (gender of therapist, race of therapist, experience (years and qualification), demographic variables and psychological variables (emotional disorders, behavioural disorders, psychotic disorders, substance abuse disorders, and health/developmental disorders, prior treatment, waiting period, diagnosis, number of sessions, and referral). The mean dropout rate calculated across all 125 studies was 46.86% ($SD = 22.25$). The study found that dropout rate differed significantly as a function of definition of dropout, with studies that defined dropout as failure to attend a scheduled session reporting substantially lower dropout rates than studies that used therapist judgement or number of sessions as indicators of dropout.

Individual factors found to be associated with treatment dropout in the meta-analysis were minority race (particularly African-American), low level of education and low socioeconomic status. Additional analyses found that variables of treatment mode, definition of dropout, or setting were not found to be significant. Adult clients

who were younger, non-married, and female were identified as being more likely to drop out of therapy. For children and mixed samples, older age, married or parental marriage, and female gender were more likely to drop out of therapy.

Thus, Wierzbicki and Pekarik's meta-analysis is the most rigorous review of treatment dropout studies to date, and the authors have examined differing definitions of treatment dropout, as well as distinguishing between adult, child and mixed samples. The major variables associated with treatment dropout were: minority race, low education and low SES. In addition, the findings suggested that with regard to child and mixed (adult and child) samples, clients who were older, female and were married or whose parents were married, were more likely to dropout of therapy. For adult samples, clients who were younger, unmarried and female were more likely to drop out of therapy. As in previous literature reviews, the main variables identified as being associated with TE were variables related to the individual, however, the latter results should be interpreted with caution due to the number of statistical tests performed.

With regard to factors which improve TE, Walitzer, Dermen and Connors' (1999) review of the literature indicated empirical support for two main strategies: pretreatment preparation and motivational enhancement. Pretreatment preparation strategies are techniques designed to familiarize the client with the rationale for and process of therapy through lecture, individual interview, or guided group exercises in order to decrease the risk for dropout and increase the benefit derived from therapy (Walitzer, Dermen & Connors, 1999). Motivational enhancement strategies are techniques designed to increase client motivation and to strengthen and stabilize the client's commitment to therapy (Walitzer et al., 1999). Preparatory techniques were associated with improved treatment attendance in the majority of studies reviewed,

and there were some indications that preparatory training may result in improved outcomes. Studies also showed that motivational enhancement techniques resulted in increased treatment participation, and improved outcomes. It is suggested that psychotherapy preparatory techniques may be effective in aligning client-therapist expectations of treatment, while motivational enhancement strategies are suggested to assist the client towards a determination that change is necessary, desirable and achievable. However, Ogrodniczuk, Joyce and Piper's (2005) review of studies which aimed to improve TE, found mixed results in relation to pretherapy preparation techniques and attendance rates.

Summary: Clinical studies of Therapeutic Engagement

In sum, the most consistently reported individual factors with regard to treatment dropout in the reviewed studies of adult clinical samples are: low SES, relatively younger clients, being unaffiliated or unmarried, race, and low level of education. Other factors which may have a role in treatment dropout in adult samples are: female gender, alcoholism, having lower levels of anxiety, depression and self-esteem problems, and being institutionally referred. In addition, poor motivation, and delay in being assigned a therapist, and possibly psychiatric diagnosis, sociopathic factors (e.g. aggression, legal trouble, hostility to authorities) and having significant other with a personality disturbance, may influence treatment dropout. Therapeutic factors associated with dropping out of treatment were dislike or disinterest in the patient, discrepant client-therapist expectations of treatment, and having patients who are less "psychologically minded" (Baekland & Lundwall, 1975; Garfield 1994). Positive or negative client expectations with regard to treatment will affect dropout respectively (Garfield, 1994).

With regard to studies specifically examining children and adolescents, older age, parental marriage, female gender, less psychologically minded parents, having been institutionally referred, and low SES have been related to treatment dropout. Children who drop out of treatment are also more likely to have developmental difficulties, unusual behaviour and non-specific symptoms and to have been truant from school (Baekland & Lundwall, 1975). Specific interventions which may improve TE were identified as pretherapy training techniques and motivational enhancement techniques. Thus the majority of clinical studies to date have examined individual and therapeutic variables in relation to their influence on TE. However, there are some indications that systemic variables, such as responsiveness of services may affect TE.

Therapeutic Engagement with Adolescents and Families in Clinical Treatment

As ASOs are adolescents and treatment often involves family members, a consideration of the findings of adolescent and family literature is also relevant. A number of studies have examined individual and therapeutic relationship variables in relation to the adolescent and family literature. Adolescent and family studies will be examined separately.

Therapeutic Engagement with Adolescents

Pelkonen, Marttunen, Laippala and Lonnqvist (2000) compared early treatment dropouts from an adolescent (12-22 years) psychiatric outpatient treatment, with two other groups: patients who had attended between three and thirteen sessions, and those who had attended more than 14 sessions ($N = 297$, mean age 16.9). Early dropouts were characterised by a number of individual factors: low parental SES, foster care, problems with the law, and having less suicidal behaviour than those with

14 or more appointments. Dropouts were also found to have substance abuse problems, but mood disorders, particularly depression, were less common. When compared with those who had attended 14 or more appointments, early dropout was associated with not having a mood disorder, not receiving psychotropic medication, having low SES and being older.

Other studies which have examined factors which influence treatment attendance and participation have used samples of adolescents in substance abuse treatment. Kaminer, Tarter, Bukstein and Kabene (1992) examined factors that differentiated treatment completers from those who failed to complete hospitalised treatment in a population of 64 dually diagnosed substance abusing adolescents. Treatment completers (78.1%) were found to have significantly more adjustment disorders (24.5% of completers) and affective disorders (26.5% of completers). Non-completers were significantly more likely to have a comorbid diagnosis of conduct disorder (78.6% of non-completers; $p < .05$). A greater percentage of treatment completer than non-completers received psychotropic medications. No differences were found with regard to demographic and legal status, education level and lifetime psychiatric diagnosis in parents/caretakers, living arrangements, treatment history, and perception of treatment benefits.

Baruch, Gerber and Fearon (1998) examined factors that differed between adolescents ($N = 134$, 12-24 years) that continued in treatment and those who terminated treatment early in a community-based psychotherapy centre. Premature dropout was defined in the study as: dropping out on the basis of a unilateral decision by the young person without the agreement of the therapist. Continuers were defined as those adolescents who stayed for more than 20 sessions. Results indicated significant differences with regards to individual variables between dropouts and

continuers in that dropouts were younger, had greater externalising problems and presented with moderate to severe hyperkinetic or conduct disorder. A systemic variable which was found to negatively affect TE was school problems. Individuals who continued in treatment were found to be significantly more likely to be older, have fewer externalising problems, be self-referred and have had a supportive therapist. As age was determined to be the most significant predictor of attendance, the analyses was repeated after dividing the sample into younger adolescents and older adolescents. In the younger sample, ethnic minority status and having a supportive therapist were associated with treatment retention, and conduct disorder diagnosis was predictive of premature termination. Within the older age group, none of the variables being examined were found to predict attendance. A step-wise logistic regression of the sample indicated that in younger adolescents, presence of conduct disorder, presence of sexual problems, and self-reported social problems were predictors of treatment drop-out.

In addition to which factors are associated with adolescents dropping out of therapy, it is important to consider what factors are associated with individuals participating more actively in during the course of therapy. A retrospective study by Wise, Cuffe and Fischer (2001) of 91 adolescents in a residential substance abuse treatment program examined variables of psychiatric diagnosis, age, gender, race, use of psychotropic medication and successful or unsuccessful participation in the treatment program. Sixty percent of the sample was found to have a comorbid psychiatric disorder. Successful participants ($N = 68$) were defined as having met their specific individualised treatment goals as determined by the treatment team. Only two variables were found to significantly influence successful participation. Males were significantly less likely to successfully participate in the treatment program than

females, as were adolescents with an Attention Deficit Hyperactivity Disorder diagnosis. While none of the other variables were found to significantly affect successful treatment participation, there was a trend of a Conduct Disorder diagnosis significantly decreasing successful treatment participation. Both this study and the previous reviewed study, found that adolescents with disruptive disorders were less likely to successfully participate in treatment programs.

Therapeutic Engagement with Families

Adolescent therapy frequently attempts to include the young person's parents or caregiver in the therapeutic process in some way. Garcia and Weisz (2002) examined factors associated with ending outpatient treatment (mental health care) in a sample of parents of 344 referred youth (7-18 years). Therapeutic relationship problems and money issues were found to distinguish therapy dropouts from therapy completers. Therapeutic relationship problems appeared to be related to parent-therapist discrepancies regarding expectations of treatment (e.g. therapist did not seem to be doing the right things), and dislike of the therapist.

Nock and Ferriter (2005) reviewed the clinical literature pertaining to attendance and treatment adherence in child and adolescent therapy, with a particular focus on the role of the parent or caregiver in managing treatment participation. Treatment attendance was defined as "the delivery of the agreed upon treatment participants (e.g. parent, child, family, etc) to the treatment setting for scheduled appointments" (Nock & Ferriter, 2005, p.151). Treatment adherence referred to the "active, voluntary, collaborative involvement of the patient in a mutually acceptable course of behaviour to produce a desired preventative or therapeutic result" (Meichenbaum & Turk, 1987, p.20) as it applied to the parent's adherence to

treatment (Nock & Ferriter, 2005). Nock and Ferriter reviewed the literature in relation to predictors of treatment attendance in child therapy and identified factors of low socioeconomic status, ethnic minority status, parent psychopathology, and severity of child psychopathology as being associated with poor attendance and premature termination of treatment. Thus variables related to both the individual child as well as familial variables were predictive poor TE.

Nock and Ferriter's (2005) review of attendance and adherence in child and adolescent therapy indicated that factors such as "parental stressors" or "logistical difficulties" (Cunningham et al., 2000; Webster-Stratton & Hammond, 1990) are associated with child therapy attendance. Discrepancies between parental expectancies for therapy and actual treatment have been associated with poor attendance and premature termination in child therapy (Day & Renikoff, 1980; Furey & Basili, 1988; Plunket, 1984). Nock and Ferriter were unable to locate any studies that examined parental motivation for child therapy.

Nock and Ferriter (2005) also reviewed studies which examined treatment adherence rather than treatment attendance. Individual factors identified as being associated with parent nonadherence to treatment were social disadvantage, parental psychopathology and stress, and older child age (Patterson & Chamberlain, 1994). A number of authors have examined whether barriers to treatment may prevent families from therapeutically engaging in clinical treatment.

Barriers to Therapeutic Engagement of Families

Treatment barriers have been posited by a number of authors as potential obstacles to therapy utilisation, attendance and adherence by a number of authors. Potential treatment barriers may include stressors, poor therapeutic relationship, and

perceptions that treatment is not relevant or too demanding (Kazdin, Holland & Crowley, 1997; Kazdin, Holland, Crowley & Breton, 1997). Clinical studies that have examined a “Barriers to Treatment” model have found that parental perception of fewer barriers to treatment resulted in lower attrition for families at high risk of dropout (Nock & Ferriter, 2005)

Snell-Johns, Mendez and Smith (2004) reviewed the literature on evidence based solutions for overcoming treatment barriers and attrition with underserved families. The review is organised within a social-ecological framework (Bronfenbrenner, 1979; Cicchetti & Lynch, 1993). This framework describes risk factors as existing at four levels: a) ontogenetic or individual, b) microsystem level (e.g. family, home, school clinic), c) exosystem or community level, and d) macrosystem or cultural level. Snell-Johns et al. identified a number of individual and familial factors associated with attendance and treatment outcome. Residence in low socioeconomic neighbourhood, and greater severity of the child’s problems were associated with increased treatment dropout. Familial variables, specifically maternal depression or distress, and single parent status were also associated with increased treatment dropout. Single parent status, level of parental psychopathology and stress and socioeconomic disadvantage were also associated with poor treatment outcome.

Snell-Johns et al. (2004) also identified a number of studies indicating the influence of factors at the exosystem or community level. Clients from rural areas can experience a number of disadvantages compared to their urban counterparts. Specifically, fewer specialised resources (Connell, Sanders, & Markie-Dadds, 1997; Sayger & Heid, 1990), difficulties attracting well-trained professionals (Connell et al., 1997), and greater difficulties with insurance coverage (DeLeon, Wakefield, Schultz, Williams & VandenBos, 1989). Clients in rural areas are also more likely travel

greater distances to reach services, and experience social isolation, thereby increasing the likelihood of treatment dropout (Connell et al., 1997; Kazdin, 1996; Sayger & Heid, 1990). In urban settings, children living in communities with lower socioeconomic status are at greater risk of developing a conduct problem than children living in other urban environments (Tolan & Guerra, 1994).

At a macrosystem or cultural level, Snell-Johns et al. (2004) identified a number of studies that suggest that failure to provide culturally appropriate treatment can influence response to treatment. Families from ethnic minorities are more likely to drop out of treatment early (Kazdin & Mazurick, 1994) and less likely to have positive treatment outcomes (McKay et al., 1999; Webster-Stratton & Hammond, 1990). Even accounting for the influence of lower socio-economic status in minority groups, a number of additional factors contribute to potential for negative therapeutic outcome. Research has indicated that factors such as racism and decreased mobility result in different life experiences for minority groups than individuals of low socio-economic status who are not from minority groups (LaVeist, 1993). Snell-Johns et al. also noted research indicating that attitudes towards receiving professional therapy may differ across cultural groups (Surgeon General, 1999).

Improving Therapeutic Engagement with Families

Nock and Ferrier's (2005) review also identified some evidence to indicate that the therapeutic setting may influence treatment attendance. A review by Chronis et al. (2004) found that attendance rates of families were higher when treatment was conducted in neighbourhood settings rather than medical settings, particularly for low-income and minority settings. With regards to therapeutic variables, use of strategies to enhance attendance also has some support in the literature in relation to improving

attendance or reducing rates of premature termination. Strategies ranged from pretherapy preparation techniques, parental payment for compliance with therapeutic directives and providing supportive discussions that focused on non-treatment issues (Nock & Ferriter, 2005).

Snell-Johns et al. (2004) also reviewed studies of underserved families which have identified strategies to overcome barriers to accessing therapy. A number of studies which have included strategies such as provision of childcare, assistance with transportation and low cost of services have resulted in effective family interventions, however the individual contributions of the strategies have not been assessed (Kinney & Ditmar, 1995; McDonald, Billingham, Conrad, Morgan & Payton, 1997). Telephone-based strategies which involve the therapist calling and engaging the family over the telephone prior to the family's first scheduled appointment, resulted in improved attendance (McKay, McCadam & Gonzales, 1996; Santisteban et al., 1996). A number of interventions which incorporate home-based services have reported successful outcomes with families (e.g. neglected children and their family, multi-problem families). A study of Multisystemic Therapy (MST) (which also incorporates home-based services) found that families which received home-based services had a 98% therapy completion rate compared to 22% therapy completion rate for families who did not receive home-based services (Henggeler et al., 1996). Snell-Johns et al. (2004) suggest these studies provide indirect support for the effectiveness of home-based services. In areas where access to services is problematic e.g. rural areas, self-directed treatments using videotapes to provide information and demonstrate skills have been examined as a method of overcoming access barriers. Connell et al. (1997) and Webster-Stratton et al. (1988) found self-directed treatment programs were effective for disruptive child behaviours and conduct problem children respectively,

and both sustained a high (98-100%) completion rate for the families in the program. Multiple-Family Therapy (MFT) groups involve a number of families attending groups sessions which are facilitated by a single therapist. A number of parent-training studies have found MFT to be effective in improving the target behaviour and good program completion rates (e.g. McKay et al., 1999; Cunningham et al., 1995; Stone et al., 1996).

Snell-Johns et al. (2004) found only a small amount of empirical support for a number of strategies designed to decrease attrition. Specifically, incentives for attendance or completion of therapeutic tasks (Stanton, Steier & Todd, 1982; Fleischman, 1979), addressing the parent's individual needs (Prinz & Miller, 1994) resulted in decreased dropout rates.

Summary: Therapeutic Engagement with Adolescents and Families

To summarise, the adolescent and family TE literature indicates that the most consistent predictor of dropout with regard to adolescents is conduct/externalising problems. Other individual factors which have been reported to influence dropout or participation in child and family studies are: lower socioeconomic status, age (findings are conflicting with regard to direction of relationship), ethnicity, severity of child psychopathology, adolescent social, sexual and school problems, substance abuse, and residing within rural areas. Familial factors associated with poorer engagement included single parent status, maternal depression, marital distress, parental stress, and parental psychopathology. Systemic factors associated with poorer engagement were being institutionally referred, problems with the law, and foster care. Therapeutic factors may include therapeutic relationship problems, discrepant parent-therapist expectations of treatment. Factors which have been

associated with improved TE are parental perception of fewer barriers to treatment, conducting treatment in settings convenient to the client (e.g. at their home), use of strategies to enhance attendance (e.g. telephone calls, incentives), self-directed treatment programs, and having the therapist achieve a balanced alliance with all family members involved in treatment.

Engagement with Serious Delinquent Populations

ASOs share many characteristics with adolescent non-sexual offenders (Veneziano & Veneziano, 2002). Thus engagement literature relating to this population may be of particular relevance. Chamberlain and Rosicky reported treatment dropout rates of over 50% in studies of conduct disordered youth. Research in populations of serious juvenile delinquents has shown that adolescents who drop out of treatment are more likely to have more severe or a greater number of conduct disorder symptoms, and to come from families with lower educational status and SES (Chamberlain & Rosicky, 1995). Mothers of children referred for antisocial behaviour also reported greater stress with regard to their child (Chamberlain & Rosicky, 1995). Research indicates that a number of factors in addition to the therapist-client relationship may influence TE. Specifically, factors relating to the individual (e.g. externalising problems), familial factors (e.g. maternal stress, low socioeconomic status), or systemic factors (school problems, institutional referrals) also appear to influence TE. These findings highlight the influence of external systems (e.g. family, school) on the TE of the young person in treatment, and suggest that intervention with these systems may be necessary to improve TE.

Given that a number of factors are associated with individuals dropping out of treatment, it seems imperative to examine factors that may enhance engagement in

treatment. In their review of the literature of child and family therapy process research, Oetzel and Scherer (2003) reported that factors such as therapist flexibility and the capacity to meet the needs and goals of multiple family members, particularly parents, are necessary features of effective TE. This suggestion highlights the idea of intervening with the family system to change the behaviour of the young person, and to enhance TE. A number of therapeutic models for adolescent offenders target involvement of the family system in the young person's treatment including Multisystemic Treatment (MST), Brief Strategic Family Therapy (BSFT), Multidimensional Family Therapy (MDFT). MST and MDFT also intervene in other systems which surround the adolescent (e.g. schools, peers). MST is an approach which intervenes with the family and other systems, and is effective with regard to treatment outcomes, yet only one study has specifically examined the influence of the MST approach on treatment engagement. Most studies of MST have been conducted with adolescent offenders, and a review of MST studies which have reported indicators of TE such as attendance and dropout is presented below.

Multisystemic Treatment (MST)

Curtis, Ronan, and Borduin (2004) conducted a meta-analysis of MST studies with youths (ages ranged from 8.3-17.6 years) with antisocial behaviour. The meta-analysis included seven primary outcome studies and four secondary studies. Seventy percent of the total sample (N = 708) was male and 54% of the youths were African-American. Eight-four percent of the youths had been arrested previously and most of the samples were drawn from disadvantaged populations. There was a moderate effect of MST across the included studies. Specifically, youths who received MST showed reduction in emotional and behavioural problems, improvement in parent-youth and

overall family relations, decreasing youth aggression towards peers and involvement with deviant peers, and reduction in youth criminality. Most importantly with regard to engagement, treatment completion rates ranged from 76%-100% for MST and 56%-100% for other treatment conditions. Although results should be interpreted with some caution as the power of the meta-analysis failed to reach the 80% criterion for design sensitivity (Cohen, 1988) and therefore had greater risk of Type II error, findings can tentatively be interpreted as MST having the potential for improved outcomes and possibly enhanced attendance in populations of adolescent offenders.

Most MST studies have been conducted under university guidance with strict protocols and fidelity checks. Henggeler, Melton, Brondino, Scherer and Hanley (1997) examined the effectiveness of MST in a community setting with only workshop training and limited supervision of treatment adherence. Thus the effectiveness of MST with regard to dropout rates can be examined in a standard community setting. The sample comprised 155 violent or chronic juvenile offenders between 11 and 17 years of age, of whom 80.6% were African American. Families were randomly assigned to either MST (n = 82) or usual services (US, n = 73). US consisted of a probation period of minimum six months, wherein adolescents were seen regularly by their probation officers and the adolescent was referred to other services (e.g. Dept. Mental Health) for particular problem areas. One of the major tenets of MST is that services were most often provided in the home at times convenient to the families. Despite this approach, there were a similar number of treatment dropouts across the two conditions over the period of the study (MST = 9% dropouts; US = 11% dropouts). Dropouts were defined as participant families who for any reason, refused or were unable to continue in the project. Thus MST did not appear to demonstrate a marked improvement over standard treatment with regard to

treatment dropout nor treatment outcome. Henggeler et al. (1997) examined whether these findings could be explained by a lack of adherence to the MST protocol. There was some evidence to support this hypothesis. In particular, therapist reports of low family engagement (actively engaging the family is considered a critical component of the MST protocol), were associated with youth incarceration. Thus the findings from this study not only indicate that the effectiveness of MST may be contingent upon therapists adhering to MST principles, but that the engagement of the family system may be influential with regards to treatment outcomes.

Another MST study by Huey, Henggeler, Brondino, and Pikrel (2000) may be useful in identifying aspects of MST which influence TE in serious juvenile offenders and substance abusing offenders. Therapist adherence to MST protocol was associated with improved family relations, however in the substance-abusing sample, therapist directed sessions were associated with non-productive sessions. Huey et al. suggested that therapists in the MST program are expected to be directive and provide structured action-orientated sessions, and are also expected to actively engage family members in treatment. Huey et al. suggested that without the engagement component, the therapist-directed strategies may not meet the perceived needs of the family, resulting in families which were poorly invested in implementing the strategies. In addition, results suggested that therapist attempts to change interactions also contributed negatively to family and peer interactions. Thus Huey et al. suggested that without effective engagement of the family system, interventions with the family are likely to be unsuccessful or even detrimental.

Henggeler et al. (1996) specifically examined the influence of MST on treatment dropout in a study of substance abusing or dependent adolescent delinquents and their families (N = 118, mean age = 15.7 years). Adolescents were randomly

assigned to receive either home-based MST or usual community services (US). Youths in the US condition were referred by their probation officer to receive outpatient substance abuse services: comprised of weekly attendance at group meetings after attending a 12-step program. Ninety-eight percent of families in the MST condition completed a full course of therapy (averaged 4.33 months, range 3-8.4 months), whilst only twenty-two percent of the comparison group attended substance abuse or mental health services. The generalisability of these findings is somewhat limited as a 12-step program was used as a comparison group, rather than an alternative form of youth or family therapy. However, given the high retention rate in the MST sample, the findings of this study indicate that MST may result in improved therapeutic engagement.

In summary, studies of MST in populations of serious juvenile delinquents indicate that clinician use of engagement strategies and meeting family goals and needs enhances therapeutic engagement. Notably, attendance rates in MST studies are much higher than reported rates of therapeutic attendance of conducted disordered youth (treatment dropout rates of over 50% in studies of conduct disordered youth)(Chamberlain & Rosicky, 1995). These findings highlight the importance of effectively engaging the adolescent's family system, not only with regard to improving treatment participation, but also as failure to engage families may result in unsuccessful treatment outcomes.

Brief Strategic Family Therapy (BSFT)

Another treatment model which focuses on actively engaging the family system in the treatment of the adolescent is Brief Strategic Family Therapy (BSFT). BSFT is a structural family-systems approach based on the work of Minuchin (1974,

1976), Haley (1976) and Madanes (1981) (Szapocznik, Perez-Vidal, Brickman, Foote, Santisteban, Hervis and Kurtines, 1988). BSFT conceptualises the behaviour of the identified client as existing within the context of the interactions of the entire family. Strategic structural-systems engagement (SSSE) is an engagement technique developed for BSFT. The goal of the therapist using the SSSE model is to begin using family therapy techniques such as diagnosing, joining and restructuring the family with the very first contact in order to facilitate the engagement of the entire family into therapy (Santisteban, Szapocznik, Perez-Vidal, Kurtines, Murray, and La Perriere, 1996).

Szapocznik et al. (1988) examined the effectiveness of SSSE in engaging adolescent drug users and their families in therapy ($N = 108$ Hispanic families). Engagement was defined in this study as the initial engagement in treatment. Specifically, the families only had to present to an intake interview to be considered as “engaged in treatment” in this study, even if they attended no further sessions. The study used a two-group experimental design with random assignment of subjects to each group: strategic structural engagement ($n = 56$) and standard treatment ($n = 52$). In the standard treatment, the therapist assigned the caller the task of bringing the drug-using adolescent and other family members to therapy (Engagement As Usual; EAU). In the SSSE condition more intense engagement strategies were used, such as establishing an alliance with the family member over the phone, and telephoning or visiting a significant other for the purposes of gaining more information. Only one therapist conducted both interventions. SSSE was significantly more effective in engaging the families initially in treatment. Only 7.4 % of families in the SSSE condition failed to present to an intake session, while over 57.7% of the EAU condition failed to present at intake. Over the course of therapy however an equivalent

number of cases (9 families) dropped out of both conditions. Whilst the number of dropouts was similar across groups, the higher intake rate of the SSSE condition resulted in more families overall successfully terminating treatment. The findings from this study provide support for the effectiveness of strategies specifically targeting engagement of the family system, however it should be noted that the EAU condition used in the study was suggested to have been more restrictive than the usual engagement strategies employed.

A second study by Santisteban et al. (1996) was conducted to examine the effectiveness of SSSE as an engagement strategy within the context of BFST. The definition of engagement in this study was revised so that families had to attend an initial intake session and one in-office therapy session within a four-week period. The study also examined whether participants successfully completed treatment, defined as having completed at least 8 therapy hours and a termination assessment battery. The sample was 193 Hispanic families of adolescents (mean age 16.6 years, 74% males) who were suspected of or at risk for drug abuse. Participants were assigned to one of three conditions: a) BFST, b) Family therapy (FT), or c) Group therapy (GT). A greater number of participants were randomly assigned to the FT without SSSE (35%) and GT (38%) conditions than the BFST condition (27%) to allow for an expected lower rate of engagement in these groups (based on Szapocznik et al., 1988). Therapists in the BFST condition used significantly more intensive engagement strategies than therapists in the other two conditions.

The BFST condition was significantly more effective in initially engaging families into treatment (81% successfully engaged) than FT (57%) and GT (62%). However there was no significant difference between the groups with regard to successful completion of treatment (BFST 69%, FT 71% and GT 63% successfully

terminated treatment). Thus, the study provides additional support for the effectiveness of targeted engagement strategies in engaging the client's family system in therapy. Furthermore, as a greater number of families were initially engaged in the BFST condition, it is possible that a greater proportion of less motivated families were engaged in this condition, and were subsequently retained in the BFST treatment.

In a third study on BFST, Coatsworth, Santisteban, McBride and Szapocnik (2001), argue that the BFST model, like MST and MDFT, conceptualise engagement as a process that is active throughout therapy, rather than merely in the early stages. SSSE intervention strategies are targeted toward key individuals who can influence the others to come in to therapy and to provide a rationale which addresses the concerns of key members. In this study, SSSE engagement techniques were incorporated into the BFST model, which was compared with a community agency (standard family therapy). Engagement in the BFST condition was defined as attendance of the adolescent and at least one other family member in the initial intake interview and the first therapy session. Engagement in the community comparison condition was defined as attendance by any member of the family (adolescent or parent-figure). Treatment retention was defined as completing the course of treatment advised by the clinician.

Participants were 104 African-American ($n = 25$) or Hispanic families ($n = 79$) with a 12-14 year old adolescent (mean age = 13.1 years, 70% male) referred for treatment. Adolescents were referred for externalising problems, internalising problems, significant academic problems, or initiated substance use. With regards to engaging and retaining families into treatment, the BSFT condition was significantly more effective (81% engaged, 72% retained) than the community comparison condition (61% engaged, 42% retained). The BFST condition was also more effective

with regards to retaining adolescents with high conduct disorder scores, and furthermore these adolescents showed greater symptom improvement (52%) than adolescents who dropped out of treatment (17%). This study indicates that the holistic view of engagement and retention in BFST, and strategies such as inclusion of key members in the therapy process shows promise in engaging and retaining families in treatment, with associated improvements in treatment outcomes

Reviews of BFST indicate that targeting multiple family members in treatment enhances TE, and therapist use of active engagement strategies may enhance TE of families, particularly in the early stages of treatment. There are also some indications that this approach may result in improved retention of conduct disordered youth.

Multidimensional Family Therapy (MDFT)

Multidimensional Family Therapy (MDFT) is another multisystemic approach aimed at targeting the individual and the domains in which the individual exists i.e. family, peer and school influences. The MDFT approach is designed to target multiple risk and protective factors as well as the multiple domains of adolescent and family functioning (Liddle, Rowe, Dakof, Ungaro & Henderson, 2004). MDFT has demonstrated effectiveness with adolescent substance-abusing populations (Liddle et al., 2004). Treatment encompasses individual factors (e.g. emotion regulation processes), parents (e.g. parenting practices), other family members, and interactional patterns that link to the development and continuation of drug use and associated problem behaviours (Liddle, Dakof, Parker, Diamond, Barrett & Tejada, 2001). There is a strong focus on engagement and establishing a foundation for treatment in addition to developing alliances with the adolescent and all relevant familial and extrafamilial sources (Liddle et al., 2001).

Dakof, Tejada and Liddle (2001) examined predictors of engagement in a sample of 224 adolescents undertaking outpatient treatment for drug abuse. The study aimed to identify key demographic, parent and adolescent characteristics that influenced engagement. Engagement in treatment was defined as participating in a minimum of four face-to-face psychotherapy sessions. Non-engagement was defined as participating in fewer than four sessions. Adolescents were classified as treatment engaged ($n = 118$) or non-engaged ($n = 106$). It was hypothesised that both family systems and individual variables (other than demographic) would distinguish between treatment engaged and non-engaged adolescents. Adolescents and their families received one of two types of treatment intervention: MDFT or cognitive behaviour therapy. In addition to demographic characteristics, the study assessed drug use, externalising and internalising symptoms, educational expectations, family functioning, parent's antisocial behaviour (assessed through history of arrest, conviction or jail) and parent psychopathology. Treatment engaged adolescents were significantly more likely to be older. In addition, parents of engaged adolescents reported higher levels of youth externalising symptoms and adolescent achievement expectation than parents of non-engaged adolescents. Finally, adolescents engaged in treatment reported greater family conflict at intake than non-engaged adolescents. The study found that a model comprised of greater parental expectations for their adolescent's educational achievement, greater externalising symptoms reported by parents and higher levels of family conflict reported by the adolescent was able to correctly classify 62% of the engaged group and 61% of the non-engaged group. These findings provide support for the influence of family systems variables as well as individual variables on the TE of the identified adolescent client.

Liddle, et al. (2001) compared MDFT with Adolescent Group Therapy (AGT), and multifamily educational intervention (MEI) in a sample of 182 clinically referred substance-abusing adolescents (mean age was 15.9 years, $SD = 1.4$). MEI and MDFT are both family-based interventions, however MDFT works with one family at a time whereas MEI works with several families at once. Whilst TE was not assessed, Liddle et al. examined attrition as an outcome variable. Attrition from treatment was defined as client-initiated termination after the first session and before session 14, or refusing to return for the posttreatment assessment battery. The definition of attrition in this study is considerably more stringent than similar studies of multisystemic treatment efficacy. Of the 182 cases assigned to treatment, 30 (16%) failed to attend even one session and were classified as treatment refusers. Of the 152 participants remaining, 14 of the 47 MDFT cases (30%), 18 of the 52 MEI cases (35%) and 25 of the 53 AGT cases (47%) did not complete treatment. The attrition rates in the two family based therapies were similar with no significant difference between the modalities. The attrition rate in the AGT therapy was significantly higher than that in the MDFT modality. Adolescents in all three modalities exhibited improvement however MDFT did generally result in greater improvement with regards to drug use, acting out behaviours and family functioning than the other two treatment modalities. However, despite a one-month focus on engaging clients in treatment and establishing a foundation for treatment in MDFT, the adolescents in the MDFT modality terminated from therapy at levels equivalent to the family therapy modality. The findings of the study do indicate that involvement of family members in the treatment processes appears to improve treatment attendance compared with adolescent group therapy, and there is some indication of improved outcomes with regards to MDFT.

One study compared an intervention which targeted the adolescent's peer system, with an intervention that intervened with multiple systems (family, school and justice system). Liddle, Rowe, Dakof, Ungaro, and Henderson (2004) reported treatment engagement and retention rates in a comparison study of MDFT and Peer Group Therapy (PGT), however the criteria for engagement and retention were not defined. The sample was 80 low-income urban adolescents (58 males, 22 females, mean age 13.73, $SD = 1.1$) referred for early intervention treatment for a substance abuse problem. The peer group therapy focused primarily on addressing the adolescent's peer group, whereas MDFT is designed to target not only the adolescent's family but also their interactions with the school and juvenile justice system. In the MDFT condition, sessions were held in the adolescent's home, treatment clinic or community locations, as appropriate, to reduce barriers to treatment. PGT was both home and clinic-based although the majority of the PGT sessions were conducted at the clinic. In order to further reduce barriers to treatment, participants were not charged for treatment and transportation assistance was made available. MDFT was more effective in reducing adolescent substance use than the PGT modality. All 3 of the clients who refused treatment (failed to attend at least one session) had been assigned to PGT (7%). MDFT clients were more likely to complete treatment with 97% of the MDFT clients successfully completing treatment compared with 72% in the PGT modality. However, retention rates in both treatment modalities are high when compared with general clinical attrition rates. It is possible that the addition of components such as home based treatment and transport assistance enhanced completion rates in this sample. Notably, however, targeting multiple systems of the young person was associated with improved engagement but also, improved outcomes.

The findings of the MDFT studies reviewed indicated that use of engagement strategies, home-based treatment delivery, and involvement of family members may enhance TE, and also treatment outcome. One study also found that adolescents who were engaged in treatment had greater externalising symptoms, greater familial conflict and parents with higher achievement expectations, possibly indicating that MDFT may be more beneficial with clients with greater individual and family symptomatology.

Generally, literature specifically addressing treatment engagement in juvenile offenders is limited, and hence only cautious interpretations can be made. Factors associated with treatment dropout in treatment with juvenile offenders include individual factors (more severe conduct disorder/externalising problems), familial factors (maternal stress, lower socioeconomic status) or systemic factors (school problems, institutional referrals). Studies show treatment models that engage the family system or intervene with multiple systems with regards to the young person show improved TE, and improved outcomes. Overall, all of the studies of multisystemic treatment models had higher rates of treatment attendance than treatment attendance rates of conduct disorder youth reported in other studies (treatment dropout rates of greater than 50%) (Chamberlain & Rosicky, 1995). An examination of research specifically examining ASOs will now be presented.

Therapeutic Engagement with Adolescent Sexual Offenders

Kraemer et al. (1998) conducted a study examining whether pretreatment variables could identify ASOs as either likely or unlikely to complete treatment. Participants were a sample of 78 male ASOs (aged 12-17 years) in a sex-offender specific residential treatment program. All participants were defined as having

offended against children. This study used demographic, personality and offence variables to identify ASOs likely to be treatment non-completers. Treatment was based on the Jessness Model of Interpersonal Maturity (Jessness, 1966, 1991) (i.e. that more behavioural treatments are appropriate at less mature developmental levels of functioning, whereas more insight-orientated approaches are applicable for more mature adolescents). A detailed description of the treatment program was not provided. Program completers were defined as those participants who successfully completed 10 sexuality-specific goals to the satisfaction of the multidisciplinary team. Of the 78 adolescents who began treatment, 52.5% were considered to have successfully completed program requirements, while 47.4% were classified as non-completers. Results indicated that completers and non-completers did not vary with regard to IQ, referral source (in-state vs. out-of-state), and ethnicity or grade level. The study examined variables of age, impulsivity, psychological maladjustment, having been charged with a criminal offence, defensiveness, knowledge of sexuality concepts and sexual obsessions. The model that was best able to predict treatment completion was comprised of only age and impulsivity, correctly classifying 76.9% of the sample, a significant improvement over chance alone ($p < .001$). Non-completers were found to be significantly older than completers and had significantly higher impulsivity scores. As mainly individual factors were examined in this study, the influence of familial or peer factors could not be determined.

Hunter and Figueredo (1999) examined treatment compliance in a sample of 204 juvenile male sexual offenders (mean age 14.3 years) participating in a community-based treatment program over a period of four years. Treatment compliance was measured through five possible outcomes of treatment, these being: expelled from the program for sexual recidivism; expelled for engagement in non-

sexual delinquent behaviours; expelled due to non-attendance and/or non-compliance with therapeutic directives; discharged for reasons unrelated to the youth (e.g. moved out of area); or remained in and/or completed treatment program.

The sample included in the program appears to have been biased toward youths who were perceived to be more amenable to treatment, and therefore less likely to dropout. Only 59.6% (121 youths) of the referred youths were accepted in to the program on the basis of amenability to treatment (e.g. individuals who completely denied having engaged in any sexual misbehaviour were generally not accepted). Also, ASOs with more complex presentations (too psychosexually or psychiatrically impaired to be treated in the community) were referred for alternative disposition such as correctional placement or residential care. Generally, the treatment protocol consisted of multiple therapeutic modalities (group, family and individual therapy), however criteria for successful completion of treatment was not provided. The average length of time considered to be required for program completion was 21.9 months.

Of the 121 youths accepted into the program, 60 (50%) remained after the first 12 months. Of the youths that did not remain in the program, 39 were considered dropouts and 22 were expelled from the program. Of the 22 youths expelled from the program, 13 youths were dismissed for non-compliance, 4 for non-sexual delinquency, 2 for sexual reoffending and 3 for reasons extraneous to the attitude or behaviour of the youth. Structural equation modelling was used to examine constructs of sexual deviancy, general psychological maladjustment, psychopathy, attitudes toward treatment, and legal status. Youths expelled for non-compliance showed higher levels of sexual maladjustment on the Multiphasic Sex Inventory (MSI; Nichols & Molinder, 1984). With regard to treatment retention, nearly 70% of the

youths who showed no denial at intake successfully complied with the program requirements for at least 12 months. Thus, individual factors such as denial and sexual maladjustment may influence whether ASOs complete treatment, however, the selection bias in the study limits whether the findings may generalise to other samples of adolescent sexual offenders.

Seabloom, Seabloom, Seabloom, Barron and Hendrickson (2003) also examined factors associated with completion of an ASO treatment program. Successful completion was defined as when the adolescent and the family met agreed-on criteria identified in a quarterly review protocol, however the specific criteria for successful completion were not described in the study. The sample comprised 122 adolescents and their families who participated in the study between 1977 and 1986. Adolescents were referred by the court (50%) or community agencies.

The sample may be biased with regards to TE as only adolescents who identified their own sense of need were included in the program, even if the treatment was mandated. In addition, the sample only consisted of adolescent males who participated in the program for greater than one month's duration, thus initial or early dropouts were not considered. As in Hunter and Figuredo's study, ASOs with more complex presentations who needed additional or more intensive services were referred elsewhere. The treatment program was intensive and included groups, individual, family therapy, and group family therapy.

Of the 122 adolescents, only 52 (43%) met criteria for successful completion. With regard to examining variables associated with successful program completion, individual variables examined were age of patient (at intake), religion, and race/ethnicity, and one familial variable (living situation (living with parents or not) was also examined. Only living situation was found to be significantly related to

successful completion, in that adolescents who lived with their parents were more likely than those in other living situations to complete treatment. A number of behavioural characteristics were also examined (e.g. attempted rape, incest, indecent exposure) however none were significantly related to successful program completion. Thus, only familial factors appeared to influence successful program completion in this study.

A recent study by Eastman (2005) examined individual variables associated with treatment failure in a sample of 138 adolescent males court-ordered to participate in a sex offender residential program. Specifically, they examined whether demographic characteristics, background characteristics, the offender's level of cognitive distortions, sexual knowledge, attitude about sexual behaviour, ability to understand the concept of empathy and self-esteem were associated with successful treatment response. Criteria for treatment success or failure was not clearly defined in the study (i.e. treatment dropout or failure to achieve treatment goals) thus it cannot be determined whether treatment failure was due to the inability of the client to meet therapeutic goals or lack of TE on the part of the client. The study utilised a separate sample, pretest posttest design. The sample was divided into three groups: adolescents beginning the sex offender treatment program ($n = 56$), adolescents who had completed the sex offender treatment program and were awaiting release ($n = 63$); and those who had not successfully completed treatment ($n = 19$). The three groups were compared on demographic, criminal history and background variables.

Adolescents who had not successfully completed treatment were significantly older than the other two groups. A discriminant analysis was also used to determine whether they could be classified correctly into the three treatment groups on the basis of treatment constructs, demographic, background, and criminal history variables (age

was statistically controlled for). A model comprised of the RAPE scale, MOLEST scale and Self-Esteem was able to successfully classify 88% of the beginning treatment group, 90% of the completed treatment group and 79% of the non-successful group. Thus non-completers appear to have had a greater degree of cognitive distortions in relation to sexual violence against women and deviant sexual behaviour (as assessed by RAPE and MOLEST scales). ASOs who completed treatment were found to have fewer problems with self-esteem and fewer observed instances of sexual abuse history. Although, the use of a separate sample pretest posttest design can provide some support with regard to treatment efficacy, it would be beyond the scope of the study to postulate that the differences between groups result from characteristics of the individual rather than resulting from treatment.

One study which has specifically examined pretreatment variables in relation to ASO treatment dropout was conducted on 49 male adolescents in a UK specialised residential treatment program (Edwards et al., 2005). The majority of the sample was white (79.6%) and not legally mandated to complete treatment. Treatment dropout was divided into three groups dependent on the length of time spent at the program: early dropouts (placement broke down within 12 months), late dropouts (dropped out after 12 months without achieving treatment goals), and program completers (remained in treatment for the full amount of funded time, regardless of their level of engagement in the program or achievement of treatment goals).

Early and late categories of treatment dropouts were collapsed into one group for the purpose of analysis. This process resulted in 49% of the sample being classified as Program Completers and 51% considered treatment dropouts. A series of chi square tests were conducted and Fisher's exact test was used to assess significant associations due to the small sample size. Twenty-five variables were found to be

significantly associated with treatment dropout. Variables may be conceptualised as individual factors, familial factors, school factors, victim characteristics, and systemic (previous abuse therapy). Individual factors included prior convictions, attitudes supportive of sexual offending, denial, bullying/aggression, interpersonal aggression, conduct disorder, unwillingness to alter deviant sex interests, selfishness/callousness, experience of abuse, emotional disorder, impulsivity, younger onset of offending, difficulty coping with negative affect, self-harm, and fire-setting. The familial factors associated with dropout were having an unemployed father and frequent absconding. School factors associated with treatment dropout were expelled/excluded from school, and school refusal/truancy. Victim characteristics identified as related to treatment dropout were: victim greater than 17 years, extrafamilial victim, male victim, victim was a child known to the offender. Many of the variables significantly associated with treatment dropout appeared to address conduct/externalising or antisocial type behaviours (e.g. history of aggression, prior conviction/caution for non-sexual offence). The pretreatment variable most strongly associated with risk of dropout was “prior conviction/caution for a non sexual offence”. However, these findings must be interpreted with caution owing to the large number of uncontrolled statistical tests performed on a relatively small sample size.

These variables were then included as potential items for a scale designed to predict dropout. Principal Components analysis was then performed on the selected variables (despite the small sample size) as a means of tentatively exploring the data. The structure appeared to indicate two factors, however both were comprised of variables which appeared to represent conduct disordered/ antisocial behaviours. The measure was able to significantly distinguish completers from dropouts. Unfortunately, only attendance rather than engagement was examined in the study.

However, the findings indicate that conduct/externalising behaviours may be a predictor of treatment dropout in this population.

The five identified studies examining indicators of TE in ASOs suggest that both familial and individual factors may influence treatment engagement. MST targets the individual (e.g. antisocial behaviours), family (e.g. parental supervision), peer, school and community factors identified as contributing to and maintaining problematic behaviour. Thus, MST also addresses the factors that appear to influence treatment engagement. Henggeler and Sheidow (2003) claim that MST is extremely effective at engaging families in treatment and removing barriers to service access. However, no studies to date have specifically examined the multisystemic models of ASO treatment with regard to effective TE. The single MST study of ASOs which has reported treatment dropout rates was reviewed.

Borduin et al. (1990) compared the efficacy of MST and individual therapy (IT) in a sample of 16 ASOs receiving outpatient treatment. MST interventions included: attempting to ameliorate deficits in the adolescent's cognitive processes (denial, empathy, distortions), family relations (family cohesion, parental supervision), peer relations (developing age-appropriate peer relations with girls and boys), and school performance. IT centred around individual counselling which focused on personal family and academic issues. IT utilised a blend of psychodynamic, humanistic and behavioural approaches, and offered support, feedback and encouragement for behaviour change. ASOs were randomly assigned to one of the two treatment conditions (8 in each condition). Although the aim of the study was not to examine adolescent engagement, treatment retention rates were reported. Of the 16 adolescents who began treatment, three adolescents and their families from each treatment condition failed to complete the full course of treatment,

thus suggesting that MST may not have a superior effect on retaining ASOs in treatment. In fact, on average, individuals who attended IT remained in therapy longer than individuals who participated in the MST condition. In four of the six cases, therapy was not completed due to the adolescent being incarcerated for a subsequent offence. With regard to recidivism rates however, the MST group had recidivism rates of 12.5% for sexual offences and 25% for non-sexual offences, compared with 75% and 50% respectively for adolescents who had received the IT condition. However, given the differences in the length of time of follow-up amongst clients, and small sample size, this study requires replication and expansion to support these findings.

The limited research on engagement in ASO treatment programs suggests that individual factors of older age, greater impulsivity, higher levels of sexual maladjustment or distorted cognitions regarding sexual behaviours, and a range of variables reflective of conduct disorder/antisocial behaviours are associated with greater treatment dropout. Familial factors associated with treatment dropout were frequent absconding and having an unemployed father, whilst residing with parents was found to positively influence treatment attendance. A number of victim characteristics have also been found to be predictive of ASO treatment dropout, however a consistent pattern of victim characteristics was not identified.

Some of the research to date with regards to TE with ASOs has been limited by selective intake of amenable clients into the treatment programs (e.g. Hunter & Figueredo, 1999); others have been conducted within residential treatment facilities, which may not be applicable to mandated clients or community settings. Furthermore, existing studies have utilised variables such as failure to complete treatment or treatment dropout as indicators of treatment engagement, which may not accurately represent TE in populations where attendance may be mandated. No identified study

has examined TE in community adolescent sexual offender population using a measure specifically designed to assess TE.

Chapter Summary

The current literature review has shown that a wide range of variables may potentially influence TE in clinical, adolescent and family, serious juvenile delinquent and ASO populations. With regards to clinical treatment studies, most of the factors identified as negatively influencing TE were individual factors or variables associated with the therapeutic relationship. Factors identified as being associated with poorer TE in clinical treatment studies were lower socioeconomic status, younger age, unaffiliated/unmarried, female gender, race, lower level of education, alcoholism, psychiatric diagnosis, lower levels of depression, anxiety and self-esteem problems, having a partner with a personality disturbance, being institutionally referred and sociopathic features (e.g. aggressive behaviour, legal trouble, hostility towards authorities). Additional therapeutic factors associated with treatment dropout in clinical treatment studies were poor motivation, delay in being assigned a therapist, therapist dislike or disinterest in the patient, discrepant therapist-client expectations of therapy, and clients who are less psychologically minded. Positive client expectations of therapy may enhance engagement. Factors associated with treatment dropout in clinical studies of children and families were lower socioeconomic status, older age, married parents, female gender, having less psychologically minded parents and being institutionally referred. With regards to clinical studies, children were more likely to drop out of treatment if they had developmental difficulties, unusual behaviour and non-specific symptoms and to have been truant from school. Evidence-based

interventions which may improve TE have been identified as pretherapy and motivational enhancement techniques.

The review of adolescent and family studies found a number of factors to be associated with treatment dropout. The most consistently identified predictor of treatment dropout in adolescents was conduct/externalising problems. Individual factors reported to influence dropout or participation in child and family studies were lower socioeconomic status, age (mixed findings), ethnicity, severity of child psychopathology, adolescent social, sexual and school problems, substance abuse, and residing within rural areas. Familial factors associated with poorer engagement included single parent status, maternal depression, marital distress, parental stress, and parental psychopathology. Systemic factors associated with poorer engagement were being institutionally referred, problems with the law, foster care. It is notable that many of the factors identified as being associated with poorer TE in this population are also present in the histories of ASOs, specifically, delinquent activity, social problems, sexual problems and school problems.

Other therapeutic factors within the child and family literature which have been found to negatively influence treatment dropout were: therapeutic relationship problems, and discrepant parent-therapist expectations of treatment. Factors associated with improved TE were parental perception of fewer barriers to treatment, conducting treatment in settings convenient to the client (e.g. at their home), use of strategies to enhance attendance (e.g. telephone calls, incentives), self-directed treatment programs, and having the therapist achieve a balanced alliance with all family members involved in treatment.

The limited research examining TE in juvenile offenders indicated rates of treatment dropout are high (greater than 50%), and that individual factors (more

severe conduct disorder/externalising problems), familial factors (maternal stress, lower socioeconomic status) and systemic factors (school problems, institutional referrals) are associated with poorer engagement. The reviewed multisystemic models used a range of strategies such as clinician use of active engagement strategies, home-based treatment and involvement of multiple family members in treatment. Overall treatment attendance rates of the multisystemic models of treatment reviewed were much higher than treatment attendance rates of conduct disorder youth reported in other studies (treatment dropout rates of greater than 50%) (Chamberlain & Rosicky, 1995).

Few studies have specifically examined TE in ASOs. Individual variables associated with poorer TE were: older age, greater impulsivity, higher levels of sexual maladjustment or distorted cognitions regarding sexual behaviours, and a range of variables reflective of conduct disorder/antisocial behaviours. Familial factors associated with treatment dropout were frequent absconding and having an unemployed father, whilst residing with parents was found to positively influence treatment attendance. A variety of victim characteristics have also been associated with ASO treatment dropout.

Overall, studies indicate that a range of factors beyond the individual and the therapeutic relationship may influence therapeutic engagement. Specifically, family variables and systemic variables may also influence engagement in therapeutic treatment settings. Few studies have examined the influence of peer relationships on therapeutic engagement. Studies examining TE in ASOs are sparse, however the broader literature review indicates that variables within the multiple systems of an individual's environment (family, school, systems) may be associated with poorer therapeutic engagement. However, the reviewed literature also found that treatment

models which target multiple systems of the young person may result in improved TE over standard treatment models. The current thesis investigates whether variables related to the multiple systems of the young person will have an influence on their level of TE in treatment. The following chapter will present the first of these studies.

CHAPTER 5

Predictors of Therapeutic Engagement with Adolescent Sexual Offenders (Study 1).

The preceding literature review has highlighted the importance of therapeutic engagement (TE) with regards to ensuring adequate treatment provision in a range of client populations. Successful TE is especially important with regards to treatment provision with adolescent sexual offenders (ASOs) as failure to therapeutically engage in mandated treatment programs may lead to a range of negative outcomes including limitations to therapeutic benefits, breaches of statutory orders, increased cost associated with legal and youth justice services, and detention. Moreover, failure to complete treatment has been associated with higher rates of recidivism in both ASOs (Hunter & Figueredo, 1999) and adult sex offenders (Hanson & Bussiere, 1998). However, few studies have specifically examined factors influencing TE in ASOs. Study 1 aimed to identify factors predictive of TE in a sample of court-referred ASOs who participated in a specialised therapeutic treatment program.

The literature in relation to TE, as described in the preceding chapter, has indicated that a range of variables outside of the client-therapist relationship have been associated with treatment retention and engagement. In general clinical samples of children and adolescents, individual variables (older age, female gender) and familial variables (having parents who were married) were related to treatment non-completion (Wierzbicki & Pekarik, 1993). The child and family literature indicated that the most consistent predictor of treatment dropout with regard to adolescents was conduct/externalising problems (Baruch, Gerber & Fearon, 1998; Kaminer, Tarter, Bukstein & Kabene, 1992; Wise, Cuffe & Fischer, 2001). However, a number of additional variables relating to the individual (age, substance abuse, sexual problems), family (foster care, socioeconomic status) and systems (school problems, institutional

referrals, problems with the law) have also been associated with poorer TE as measured by treatment dropout (Baruch et al., 1998; Pelkonen et al., 2000).

Research with populations of serious juvenile delinquents (who share many characteristics with ASOs, Veneziano & Veneziano, 2002) show that factors relating to the individual (e.g. conduct disorder), familial factors (e.g. maternal stress, low socioeconomic status), or systemic factors (e.g. school problems, institutional referrals) appear to influence therapeutic engagement (Chamberlain & Rosicky, 1995). The literature indicates that a number of factors in addition to the therapist-client relationship may influence TE.

Few studies have specifically examined TE in samples of ASOs, however literature reviewed in the current thesis identified a number of variables associated with treatment noncompletion. Individual variables associated with poorer TE were identified as older age (Edwards et al., 2005; Kraemer et al., 1998), greater impulsivity (Kraemer et al., 1998), higher levels of sexual maladjustment or distorted cognitions regarding sexual behaviours (Eastman, 2005; Hunter & Figueredo, 1999), and a range of variables reflective of conduct disorder/antisocial behaviours (Edwards et al., 2005). Fewer studies have examined systemic variables (e.g. school, peer, family) however familial factors associated with treatment dropout were frequent absconding and having an unemployed father (Edwards et al., 2005), whilst residing with parents was found to positively influence treatment attendance (Seabloom et al., 2003). School factors associated with treatment noncompletion were identified as school expulsion and truancy (Edwards et al., 2005). A variety of victim characteristics have also been associated with ASO treatment dropout (Edwards et al., 2005). However the findings of the latter studies should be interpreted with caution owing to bias in some studies with regards to criterion for acceptance (e.g. Hunter &

Figueredo, 1999). Similarly to clinical samples of adolescents, and juvenile offenders, extra-familial factors may also affect TE in ASOs.

Treatment programs for ASOs that target the multiple systems of the young person tend to report higher rates of treatment completion than conventional individual-level or group-based programs. Multisystemic treatment models are based on the premise that a young person's behaviour does not exist in isolation, but is influenced by the systems he is within (e.g. family systems, peers systems). Multisystemic treatment (MST) models therefore propose that effective treatment interventions to change the young person's behaviour must target each of the systems influencing the young person's behaviour. The current study examines the theoretical proposition that multisystemic variables will similarly affect the young person's TE.

If variables associated with poorer TE can be identified, interventions can then be tailored to address the specific needs of clients whom clinicians find particularly difficult to engage, theoretically resulting in improved therapeutic engagement. Study 1 enhances TE research with ASOs through the specific examination of the relationship between multisystemic variables and ASO TE in a mandated treatment program. Studies examining ASO TE to date have used indicators of TE such as attendance or treatment completion. Use of these indicators may not reflect ASO TE in a mandated treatment programs, as ASOs may attend treatment to meet the requirements of their court order, yet remain psychologically detached or not fully commit to the treatment program. Study 1 aims to improve on previous research in relation to TE with ASOs through use of a validated engagement measure. TE in the current study is defined as a multi-faceted construct encompassing attendance, client-therapist interaction, communication, perceived usefulness of treatment and psychological involvement in treatment (Hall, Meaden, Smith & Jones, 2001).

Method

Participants

Participants were 105 male adolescents referred by the court and who participated in a specialised treatment program between 2001 and 2005. All participants had been referred because they had either pleaded guilty or were found guilty of at least one sexual offense. Ages of participants at referral ranged from 11 to 18 years ($M = 15.53$, $SD = 1.30$). Participants consented to their information being used for research purposes.

Measures

Demographic and offence history. Data obtained from official information collated in treatment program computer records were used to create demographic and offence history variables.

Externalising and internalising behaviours. Behaviours of the ASOs were assessed using the Externalising and Internalising psychopathology scales of the Youth Self-Report Form (YSR; Achenbach, 2001), a youth self-report version of the Child Behaviour Checklist (CBCL; Achenbach, 2001). The YSR is a self-report form for adolescents aged between 11 and 18. It consists of eight problems subscales, five of which can be further subgrouped into the two broad problem behaviour categories: Internalising and Externalising. The Externalising subscale assesses problems regarding conduct difficulties e.g. impulsivity, rule-breaking, aggressive behaviour, and social problems. The Internalising subscale assesses depressive and anxious symptoms as well as problems with attention and concentration. T-scores for both scales were used in the present study. The YSR has been used extensively in clinical settings and has proven test-retest reliability and factorial and discriminant validity

(Achenbach, 2001). Internalising and Externalising scales have reported test-retest reliability of .80 and .89, respectively, and internal consistencies of $\alpha = .90$ for both scales (Achenbach, 2001). Interrater reliability for the YSR has been reported as $r = .96$. Both the CBCL and the YSR have been used in previous research with adolescent sexual offenders (e.g. Worling & Curwen, 2000).

Sexual drive/sexual preoccupation. This construct was measured using the Sexual Drive/Sexual Preoccupation (Scale 1) of the Juvenile Sexual Offender Assessment Protocol – II (JSOAP-II). The J-SOAP-II has been shown to possess good inter-rater reliability, with total score reliability coefficients ranging from $r = .84$ (Viljoen et al., 2008) to $r = .95$ (Parks & Bard, 2006). Scale 1 of the JSOAP-II is an 8-item scale assessing sexual behaviours associated with ASO risk of recidivism. Each item is rated from 0-2, with (0 = absence of that item, 2 = clear presence of that item), and then added to yield a total scale score (0-16). Internal consistency of Scale 1 of the JSOAP-II has been reported to be $\alpha = .72$ (Martinez, Flores, & Rosenfeld, 2007).

Impulsivity/antisociality. This construct was measured using the Impulsive/Antisocial Behaviour (Scale 2) of the JSOAP-II (Prentky & Righthand, 2003). Scale 2 of the JSOAP-II is an 8-item scale assessing a range of juvenile conduct disorder and antisocial behaviours. Each item is rated from 0-2, with (0 = absence of that item, 2 = clear presence of that item), and then added to yield a total scale score (0-16). Caldwell, Ziemke, and Vitacco (2008) reported that J-SOAP-II scale 2 was positively correlated ($r = .39$) with the Psychopathy Checklist – Youth Version. Internal consistency of Scale 2 of the JSOAP-II has been reported to be $\alpha = .74$ (Martinez et al. 2007).

Parenting quality. The Alabama Parenting Questionnaire (APQ; Shelton, Frick & Wooton, 1996) was used to assess the quality of parenting experienced by the

ASOs. The APQ measures six dimensions of parenting which are empirically identified as risk and protective factors for delinquency: maternal involvement, paternal involvement, parental monitoring, positive parenting, inconsistent discipline and corporal punishment. The APQ is a self-report measure, which was completed by the ASOs. The APQ consists of a five-point endorsement scale (never, almost never, sometimes, often, always). The measure has acceptable reliability and validity, including with Australian samples, with test-retest reliability of $r = .66-.95$ (Dadds, Maujean & Fraser, 2003; Shelton, Frick & Wooton, 1996). Reported internal consistencies are relatively poor, ranging from $\alpha = .37$ to $.59$ (Dadds, Maujean & Fraser, 2003; Shelton, Frick & Wooton, 1996). Initial validation studies were conducted on younger adolescents (11-13years), although the measure has since been used with older (11-18 years) adolescent samples (Kamon, Budney & Stanger, 2005). Self-ratings by adolescents have produced internal consistency values ranging from $\alpha = .42$ (corporal punishment) to $\alpha = .90$ (paternal involvement) (Frick, Christian, & Wooton, 1999).

Peer relationships. The peer rating item from the Community Stability scale (Scale 4) of the Juvenile Sex Offender Assessment Protocol (JSOAP-II; Prentky & Righthand, 2003) was the only information available with regards to the ASO's peer relationships, and thus was used as an indicator of the young person's peer relationships. The item asks the counsellor to rate the nature and quality of the juvenile's peer relationships, the extent to which the juvenile's time is occupied by non-delinquent social activity, and the extent to which peer associations are age appropriate and non-delinquent. The item is scored on a 3-point scale ranging from 0, indicating a high level of non-delinquent social activity, to 2, indicating withdrawal/social isolation, or that most of the juvenile's peers are delinquent.

Youth Justice Service Office (YJSO) responsiveness. Staff within regional YJSOs provide case management for the ASO and assist with their attendance of treatment appointments. In order to statistically account for the potential influence of the YJSO on ASO therapeutic engagement, a simple clinician-rated scale was developed to assess the responsiveness of the YJSO with regards to facilitating the ASOs treatment. Clinicians rated the YJSO to which each ASO was reporting, according to six levels of responsiveness (highly unresponsive to highly responsive), with high scores reflecting higher levels of responsiveness. Highly unresponsive services were characterised by referrals not being made in a timely manner, not returning calls, and not following through on arrangements/appointments. Highly responsive services were characterised by being very responsive, returning calls promptly and taking initiative in contacting treatment clinicians. A subset of YJSOs were rated by two clinicians, yielding a strong inter-rater reliability score of $r = .77$ ($p < .01$).

Therapeutic engagement. TE of the ASOs was measured using the clinician-rated Engagement Measure (Hall et al., 2001). The Engagement Measure assesses five dimensions of TE: appointment-keeping, client-therapist interaction, communication-openness, client's perceived usefulness of treatment and collaboration with treatment. Items are rated on five-point Likert scales from 1 (Never) to 5 (Always). Validation studies of this measure have reported good test-retest reliability with total score correlations of $r = .90$. Good inter-rater reliability has also been reported with item correlations ranging from 0.86 to 1.0 (Hall et al., 2001). For the purposes of the current study, two items were removed from the original 11-item measure prior to administration. One item rating medication compliance was removed as it was deemed not relevant for most ASOs in the treatment program, or able to be rated by

reliably by the treating clinician. One of the two items assessing attendance was also removed as it assessed attending appointments without assistance, and ASOs generally receive assistance to appointments. The final 9-item measure yielded potential scores ranging from 9 to 45, with high scores indicating greater TE. Internal consistency for the modified 9-item measure in the current ASO sample ($n = 105$) was $\alpha = .95$, indicating that removal of the two items from the original measure did not diminish its reliability.

Procedure

All data except the Engagement Measure and YJSO ratings were obtained from a treatment program database which collates information from official records and clinical files, and routinely administered client measures (administered during initial assessment). Information for each ASO is recorded in the database using a coded identification number. The Engagement Measure was given to clinicians along with a list of relevant client numbers. Measures were then completed by clinicians and collected by the researcher. All de-identified information was compiled into a complete database. Ratings of the TE measures were rated between September 2004 and May 2005. Engagement ratings were completed on clients who participated in specialised treatment between April 2001 and May 2005.

As two items were deleted from the Engagement Measure, a number of psychometric analyses were conducted on the 9-item measure. The new total summed scores were normally distributed. An exploratory factor analysis was conducted to examine the factor structure. Analysis revealed a single factor of engagement. Item loadings ranged from .58 to .91 and Cronbach's alpha was .95. Although the sample

size is small for a factor analysis, the Cronbach's alpha in the current study was similar to the Cronbach's alpha (0.89) found by Hall et al. (2001).

For the purposes of examining inter-rater reliability, an additional small sample ($n = 16$) of ASOs had Engagement Measures that were rated by the ASO's treating clinician, and by the Clinical Manager based on her own knowledge of the ASOs obtained through direct contact with those ASOs, and her supervision of clinicians. The small sample did not comprise part of the current study sample ($N = 105$). Inter-rater reliability was $r = .82$ ($p < .001$). There was no significant difference between mean ratings of TE by the treating clinicians ($M = 33.31$) and Clinical Manager ($M = 33.06$). Finally the relationship between the criterion variables and TE was analysed using correlational analyses and linear regression.

Results

Data Screening

Complete Engagement Measure data was available for all 105 ASOs, and missing data for the remaining variables ranged from 1-14% in the correlational analyses and 0-3% in the regression analysis. Missing data were determined to be distributed randomly throughout the sample (Little's MCAR test was non-significant).

All variables were examined to ensure that ranges fell within valid parameters. Analyses were conducted using SPSS version (11.5) (SPSS Inc, 2002). Data were screened for missing values, outliers, skewness and kurtosis.

One variable was found to have a univariate outlier prior to conducting the analyses: Externalising behaviours. In order to reduce the influence of the outlier, the extreme scores was changed to a score that was one unit larger than the next most extreme score in accordance with Tabachnick and Fidell (1996).

Power

Power analyses indicated adequate power to detect medium effect sizes for both regression and correlational analyses in Study One. A sample size of 98 would have power of 0.90 to detect a medium effect with an alpha level of 0.05 in a regression analysis. A sample size of 71 would have power of 0.90 to detect medium effect sizes with an alpha level of 0.05. Power analyses were calculated using Statistic Calculators (Soper, 2009) and G*Power 3.0.10 (Faul, Erdfelder, Lang, & Buchner, 2007).

Sample Characteristics

The sample ($N = 105$) of male ASOs, included 33 Indigenous (31.4%) and 72 Non-Indigenous ASOs (68.6%). Means and standard deviations of the variables included in the analysis are presented in Table 1.

Table 1

Means and standard deviations of predictor and criterion variables ($N = 105$)

Variable	Mean	Std. Deviation	Range
Age at referral	15.53	1.30	11-18
Sexual preoccupation	3.06	2.59	0-11
Impulsivity/antisociality	6.63	4.32	0-16
Internalising	57.67	10.32	30-77
Externalising	59.51	10.72	29-88
Maternal involvement	28.91	0.94	4-48
Paternal involvement	23.77	1.29	1-47
Parental monitoring	27.24	7.64	11-46
Positive parenting	18.84	4.88	6-30
Inconsistent discipline	14.74	4.30	6-26
Corporal punishment	5.48	2.53	3-13
Peer relationships	1.20	0.70	0- 2
YJSO responsiveness	3.92	1.53	1- 6
Therapeutic engagement	30.63	7.72	10-45

Mean age at referral was 15.53 years ($SD = 1.30$) with ages ranging from 11-18. One ASO had a prior history of sexual offences, and 29 (32.7%) had a prior

history of non-sexual offences. Scores related to risk (JSOAP-II) ranged from 0-11 ($M = 3.06$, $SD = 2.59$) for sexual drive/preoccupation; and from 0-16 ($M = 6.63$, $SD = 4.32$) for impulsivity/antisociality. Non-Indigenous ASOs were rated higher than Indigenous ASOs ($M = 1.91$, $SD = 1.72$) on sexual drive/preoccupation, $t(103) = 3.20$, $p = .003$, but did not differ significantly on ratings on impulsivity/antisociality. There were no differences between Indigenous and Non-Indigenous clients with regards to internalising or externalising behaviours. Internalising t-scores ranged from 30 to 77 ($M = 57.67$; $SD = 10.32$), and externalising t-scores ranged from 29 to 88 ($M = 59.51$; $SD = 10.72$). Mean ratings of TE are presented in Table 1. Indigenous ASOs rated significantly lower ($M = 26.48$; $SD = 7.70$) than Non-Indigenous ASOs ($M = 32.5$; $SD = 7.00$) with regards to the Engagement Measure, $t(103) = 3.98$, $p < .001$.

Predictors of Therapeutic Engagement

Correlations between putative predictors of TE are presented in Table 2. Small to moderate negative correlations were found between TE and impulsivity/antisociality ($r = -.45$, $p < .01$), negative peer relationships ($r = -.24$, $p < .05$) and Indigenous Status ($r = -.37$, $p < .01$). A moderate negative correlation was also found between impulsivity/antisociality and negative peer relationships ($r = -.33$, $p < .01$).

Table 2
Correlations among putative predictors of therapeutic engagement (N = 105)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age at referral	-.02	-.26**	.07	-.12	.05	.15	.13	.06	-.10	-.20	-.02	.02	-.03	.07
2. Sexual preoccupation		.22*	.00	.06	-.05	-.04	.07	.06	-.06	-.17	.19	.10	-.30**	.02
3. Impulsivity/antisociality			.09	.39***	.02	-.21*	.17	-.11	.13	.05	.33**	.02	.08	-.45***
4. Internalising				.59***	-.02	-.03	.42***	.01	.25**	.02	.25*	-.05	.10	.12
5. Externalising					-.06	-.28**	.59***	-.16	.39***	.16	.30**	-.06	.09	-.12
6. Maternal involvement						.28**	.17	.41***	.29**	.17	-.17	-.25*	.11	.05
7. Paternal involvement							-.06	.48***	.01	.03	.01	-.07	-.03	.06
8. Parental monitoring								-.05	.55***	.13	.27**	.01	.10	.08
9. Positive parenting									.06	-.12	-.08	-.16	-.01	.09
10. Inconsistent discipline										.39***	.22*	.05	-.01	-.13
11. Corporal punishment											.12	-.14	.22*	-.18
12. Peer relationships												.08	-.01	-.24*
13. YJSO responsiveness													-.34***	-.01
14. Indigenous status														-.37***
15. Therapeutic Engagement														

* p<.05; ** p<.01; *** p<.001

A standard multiple regression was performed with TE as the dependent variable. The three putative predictor variables found to be significantly correlated with TE, were entered into the multiple regression analysis, specifically, impulsivity/antisociality, negative peer relationships, and Indigenous status. SPSS FREQUENCIES was used to evaluate assumptions and analyses were performed using SPSS REGRESSION (SPSS, Version 12).

Table 3 summaries the results of the standard multiple regression. The overall regression model with all of the variables included was significant, $F(8,106) = 15.86$, $p < .001$ and accounted for 33% of the variance in TE as assessed by the Engagement Measure (Hall et al., 2001).

Table 3

Summary of results of a multiple regression of impulsivity/antisociality, peer relationships, and Indigenous status, on therapeutic engagement (N = 105)

Predictor	Beta	t	Part correlation	R ²	F
Impulsivity / antisociality	-.357	-4.04*	-.34		
Peer relationships	-.123	-1.40	.12		
Indigenous	-.359	-4.30*	-.36		
				0.33	15.86*

* $p < .001$

Impulsivity/antisociality, $t = -4.04$, $p < .001$, and Indigenous status, $t = -4.30$, $p < .001$, both explained unique variance in TE of ASOs. However, shared variance associated with peer relationships rendered this variable non-significant in the regression analysis. Examination of part correlations showed that impulsivity/antisociality accounted for just over 11% of unique variance, and that Indigenous status accounted for nearly 13% of unique variance in TE.

Discussion

Initial correlational analyses indicated that peer relationships, Indigenous status and impulsivity/antisociality were associated with clinician-rated TE of ASOs. Regression analyses found that peer relationships was not predictive of TE after accounting for shared variance with Indigenous status and impulsivity/antisociality. Both Indigenous status and impulsivity/antisociality were predictive of a significant proportion of unique variance in TE. Furthermore, the overall model containing peer relationships, Indigenous status and impulsivity/antisociality accounted for approximately one third of the variance in TE.

The finding that Indigenous status was predictive of lower TE was consistent with previous research which has identified challenges to TE associated with Indigenous populations. Similar difficulties in engagement have been identified in a number of studies of services working with Indigenous communities (e.g. Cull & Wehner, 1998; Stathis, et al., 2007). Specifically, the unique cultural needs, negative social problems within communities and remote localities may have acted as barriers for clinicians to effectively engage therapeutically with Indigenous ASOs. This finding may suggest that additional strategies may be required in treating Indigenous ASOs in order to overcome the identified barriers with regards to engaging this population.

The relationship between impulsivity/antisociality and lower TE was also consistent with previous research. Studies of therapeutic treatment with adolescent clinical samples (Baruch et al., 1998; Kaminer et al., 1992; Wise et al., 2001), juvenile offenders (Chamberlain & Rosicky, 1995) and ASOs (Kraemer et al, 1998; Edwards et al, 2005) have found that impulsivity and conduct disorder/antisocial behaviour were associated with failure to complete treatment. There is some research to suggest that individual-level factors may influence TE as impulsivity/antisociality has been found to be associated with lower levels of motivation to change, which in turn is associated with

poorer treatment attendance (Hird, Williams & Markham, 1997; Melnick, De-Leon, Hawke, Jancill & Kressel, 1997). Other individual-level factors have also been suggested as barriers to TE with adolescent offenders including association of antisocial behaviours with self-identity, externalising difficulties, limited self-reflection skills, mistrust of authority figures, and deficits in feelings of acute emotional stress or guilt (Hemphill & Howell, 2000). Implications of these findings will be addressed in Chapter 9.

It is also possible that there is an interaction effect between ASOs who have higher levels of impulsivity/antisociality and their treating clinician and various supports (caregivers, caseworkers, etc). For example, clinicians may have less empathy for ASOs with antisocial behaviours, or caregivers may be fatigued and less able to provide a proactive level of practical support, or alternatively caregivers may also have antisocial behaviours which reinforce the ASO's own antisocial behaviours.

Previous research with ASOs report high rates of treatment non-completion, and outcome studies have found treatment non-completion to be associated with increased risk of recidivism in both adolescent and adult sexual offender samples (Hunter & Figueredo, 1999; Hanson & Bussiere, 1998). Despite these findings, few studies have specifically examined TE in ASOs. Moreover, multisystemic treatment studies typically report lower rates of treatment non-completion, yet few studies have specifically examined systemic factors that may be associated with improved TE. Study 1 aimed to improve on previous research in this area through the use of an empirically validated measure of TE. The variables examined in the current study were able to explain a significant amount of the variance in TE as assessed by the engagement measure. The identification of specific variables associated with poorer TE, enables clinicians to tailor treatment interventions to address these variables and thereby potentially improve TE.

The study may also have been limited by the use of a single-item measure to assess peer-relationships, and it is possible that a more comprehensive measure may have accounted for a larger proportion of the variance in TE. The systemic variables examined in Study 1 were not predictive of ASO TE. However, it is possible that systemic variables other than YJSO responsiveness and parenting quality may be more influential on ASO TE. For example, the engagement of familial caregivers and YJSO caseworkers in the ASO's therapeutic treatment may have a more direct relationship with the ASO's TE in treatment. The aim of Study 2 therefore is to examine TE of stakeholders involved in the ASO's treatment, specifically, the ASO, the caregiver, and the YJSO caseworker. A second aim of Study 2 is to assess whether clinicians, caseworkers and caregivers are able to rate ASO TE similarly to the ASO.

CHAPTER 6

The Relationship between Therapeutic Engagement of Stakeholders and Adolescent Sexual Offenders (Study 2)

Multisystemic treatment models are based on the premise that involving both the young person and their family in treatment, and addressing the influence of peer and community systems, results in improved outcomes (Henggeler & Sheidow, 2003). This premise in turn implies that changing the behaviour of the young person requires key stakeholders within the adolescent's environmental systems to support and commit to the achievement of therapeutic outcomes. Study 2 examined the relationship between the therapeutic engagement (TE) of stakeholders in the adolescent sexual offender (ASO)'s treatment and the TE of the ASO themselves.

Researchers examining therapeutic alliance, a construct encompassed within TE, have found differences between client and observer reports of alliance in relation to therapeutic outcomes. Horvath and Symonds (1991) in their meta-analysis of alliance and psychotherapeutic outcomes found that client ratings of therapeutic alliance showed a stronger relationship with therapeutic outcomes than clinician/provider reports in adult samples. A meta-analysis of therapeutic alliance in adult populations by Martin, Garske and Davis (2000) also showed differences between client ratings and therapist or observer ratings. Specifically, clients tended to rate their alliance consistently over time, whilst therapists and observers indicated more change over time in their observer ratings, although sample size for this aspect of the analysis was small. Although Martin et al.'s meta-analysis showed that alliance was related to treatment outcomes, there was no influence with regards to source of alliance-rating (patient, therapist or observer). A meta-analysis of child and adolescent therapy did show variation in ratings of alliance

dependent on rating source (child/adolescent, therapist/treatment provider, parent/family member) with therapist/treatment provider ratings of alliance showing a stronger relationship with therapeutic outcome than did child self-report (Shirk & Karver, 2003). The congruence of ratings of ASO TE by multiple sources was examined in Study 2.

Literature reviewed earlier in this thesis has highlighted the importance of TE in ASO treatment populations. A number of multisystemic treatment models focus on engagement of the family in treatment thereby enhancing the benefits of treatment. Huey, Henggeler, Brondino, and Pikrel (2000) note that therapists in Multisystemic Treatment (MST; Curtis, Ronan and Bourduin, 2004; Henggeler et al., 1997) are expected to actively engage family members in treatment. Studies of Multi-Dimensional Family Therapy (MDFT), a multisystemic treatment approach with demonstrated effectiveness with adolescent substance abusing populations, report a strong focus on engagement and establishing a foundation to treatment (Liddle et al., 2001). Szapocznik et al. (1988) found that clinician use of intensive engagement strategies (e.g. establishing alliance with a family member over the phone; visiting a significant other for the purposes of gaining more information) was associated with improved engagement with families during the initial stages of treatment.

Multisystemic treatment approaches view the youth as embedded within a network of interconnecting systems that encompass individual, family and extrafamilial factors and identified that intervention is often necessary in a combination of these systems (Henggeler & Sheidow, 2003). Thus caregivers and key stakeholders within the young person's environment are perceived as integral to achieving desired client outcomes. Oetzel and Scherer (2003), in their review of clinical child and family literature, reported that the capacity to meet the needs and goals of multiple family members, particularly parents, is a necessary feature of therapeutic engagement.

Moreover, therapists' reports of low family engagement have been associated with youth incarceration (Henggeler et al., 1997). Multisystemic treatment programs with ASOs also tend to report much lower rates of treatment non-completion than those typically reported from conventional individual-level, group-based programs. The degree of engagement of caregivers and key stakeholders in treatment may therefore impact upon the TE of the client, and potentially influence therapeutic outcomes. Study 2 examines the association between the level of TE in caregivers and Youth Justice Service Office (YJSO) caseworkers, and the level of ASO TE and satisfactory progress toward therapeutic outcomes.

In summary, Study 2 aimed to examine TE of ASOs in relation to a number of aspects of a multisystemic treatment model. The study was conducted with a sample of court referred ASOs participating in a specialised treatment for sexual offences. Specifically, Study 2 aimed to address the following research questions:

1. Are clinicians, caregivers and caseworkers perceptions of ASO TE congruent with ASOs' self-rated TE?
2. Are caregiver and caseworker self-rated TE associated with ASO TE and progress toward therapeutic outcomes (satisfactory goal progress)?

Method

Participants

Participants were 16 male ASOs referred by the court and who had participated in a specialised treatment program between 2003 and 2007. Ages of ASOs at referral ranged from 14 to 17 years ($M = 15.13$, $SD = 1.15$). Questionnaires were also collected from each ASO's consenting clinician ($n = 4$ (1 Male, 3 Female), all registered psychologists); caseworker ($n = 16$) and caregiver ($n = 8$). Participants consented to the research project. Only 8 of the 16 ASO had a consistent caregiver and completed

questionnaires, the remainder of the ASOs either did not have a consistent caregiver or did not have parental involvement. The 16 ASOs were case-managed by twelve different Youth Justice Service Area Offices.

Measures

Therapeutic engagement. TE was measured using the Engagement Measure (Hall et al., 2001). For a detailed description of this measure, refer to Measures in Study 1. The Engagement Measure is available in self-rated and observer-rated versions. The ASO, caregiver and caseworker completed the self-rated version of the Engagement Measure in relation to their own therapeutic engagement. The clinician, caregiver and caseworker completed the observer-rated version of the Engagement Measure to rate the ASO's therapeutic engagement. In the current sample, strong positive correlations were found between the ASO Engagement Measure and the Working Alliance Inventory ($r = .53, ns$) (a measure of therapeutic alliance; Horvath, 1981; Horvath & Greenburg, 1986, 1989), the Action scale of the Stages of Change Measure ($r = .79, p < .01$) (a measure of client readiness to change; McConaughy, Prochaska & Velicier, 1983) and a strong negative correlation with the Intervention scale of the JSOAP-II ($r = -.72, p < .01$) (Prentky & Righthand, 2003). These findings indicate strong support for the convergent validity of the ASO 9-item Engagement Measure.

Impulsivity/antisociality. This construct was measured using the Impulsive/Antisocial Behaviour (Scale 2) of the JSOAP-II (Prentky & Righthand, 2003). Scale 2 of the JSOAP-II is an 8-item scale assessing a range of juvenile conduct disorder and antisocial behaviours. Each item is rated from 0-2, with (0 = absence of that item, 2 = clear presence of that item), and then added to yield a total scale score (0-16). Internal consistency of Scale 2 of the J-SOAP-II has been reported to be $\alpha = .74$ (Martinez et al., 2007). Caldwell, Ziemke, and Vitacco (2008) reported that J-SOAP-II

scale 2 was positively correlated ($r = .39$) with the Psychopathy Checklist – Youth Version.

Satisfactory goal progress. Each ASO is required to complete a number of individualised therapeutic goals as part of their treatment (e.g. development of a relapse prevention plan). Clinicians rated whether the ASO was making satisfactory progress toward achieving their therapeutic goals, taking into account their stage in treatment. Progress was rated on a 5-point scale (1 = No Progress, 2 = Some Progress, 3 = Satisfactory Progress, 4 = Good Progress, 5 = Excellent Progress).

Procedure

All ASOs in treatment between May 2006 and August 2007 were approached to participate, along with each ASOs caregiver, YJSO caseworker and clinician. All ASOs and their families received the standard assessment and treatment offered by the program and the usual engagement strategies employed by the clinicians. A consent and data collection process was developed in conjunction with clinicians that allowed the ASO and the family to remain anonymous from the researcher. The consent and data collection procedure also ensured that ASOs were not invited to participate in the research by their treating clinician (on whom they were completing ratings), and that individual participant responses remained confidential from the clinician.

Clinicians were given a brief information sheet explaining the current research study, and all consented to participate. The clinician gained informed consent from the ASO's caregiver and allowed the caregiver to complete the questionnaire in private then place it in a sealed envelope to be returned to the researcher. Caregivers had the option of contacting the researcher via telephone if they required assistance in completing the questionnaires. Once caregivers had provided consent, the clinician advised the researcher of the ASO's research identification number which was then recorded on

caregiver, ASO, caseworker and clinician questionnaires. The caseworker was then approached by the researcher with regard to consenting to participate in the project themselves, and to assist in requesting consent and data collection with the ASO. The caseworker gained informed consent from the ASO and assisted the ASO in comprehension of questionnaires as necessary with assistance from the researcher via telephone. Both ASO and caseworker questionnaires were placed into sealed envelopes and returned to the researcher. Upon obtaining informed consent from both the ASO and their caregiver, the researcher advised the clinicians of the ASOs identification number, and the relevant clinician completed the questionnaires in relation to that ASO. If the questionnaires were not returned after two weeks, the researcher contacted the caseworker and counsellor to prompt them to arrange for questionnaire completion and return. Upon return of all questionnaires, data were entered into a computer file, and then collated with demographic, assessment information and offence history data obtained from official information collated in the treatment program clinical computer records using the ASO research identification number.

ASOs completed the self-rated Engagement Measure. Caregivers and caseworkers completed the self-rated Engagement Measure with regards to their own TE in the ASO's treatment, and the other-rated Engagement Measure in relation to the ASO's TE in treatment. The clinician completed the other-rated Engagement Measure in relation to the ASO's TE in treatment. Questionnaires were completed between June 2006 and June 2007. Questionnaires were completed in relation to ASO clients who participated in treatment between May 2006 and August 2007.

Results

Sample Characteristics

The sample of male ASOs ($n = 16$) included 4 indigenous (25%) and 12 non-indigenous youth (75%). Mean age at referral was 15.13 years ($SD = 1.15$) with ages ranging from 14 to 17. None had a prior history of sexual offences, and 2 (12.5%) had a prior history of non-sexual offences. Impulsivity/antisociality scores ranged from 1 to 14 ($M = 6.06$; $SD = 4.52$). There were no significant differences between Indigenous and Non-Indigenous ASOs on impulsivity/antisociality. ASO TE scores ranged from 29 to 44 ($M = 37.56$; $SD = 4.08$). There were no significant differences between Indigenous ASOs ($M = 36.25$) and Non-Indigenous ASOs ($M = 38.00$) with regards to TE. Therefore the sample of Indigenous and Non-Indigenous ASOs was examined as a total sample.

Power

Results of the Study 2 should be interpreted with caution as a sample of 25 was needed to detect a large effect size (.35) in a correlation analysis. The sample size of $n = 16$ results in a power of .31 (or a 31% chance of detecting an effect if one genuinely exists) of finding a medium effect size (.3, Cohen, 1988 p 86) or power of .66 (or a 66% chance of detecting an effect if one genuinely exists) of detecting a large effect size (.5, Cohen, 1988 p 86) in a correlational analysis ($\alpha = .05$).

A non-directional independent samples t-test using 8 in each group would result in power of .15 of finding medium effects (.5) and power of .32 of finding a large effect (.8; Cohen, 1988, p30) ($\alpha = .05$). Power to detect small effects (.2) is very low (.07), that is, only 7% chance of correctly rejecting the null hypothesis. As such, only large effects are likely to be detected in the current study, with greater risk of a Type II error (failing to detect a significant result where one genuinely exists).

Data Screening

A number of strategies were enacted to ensure that the amount of missing data was reduced as far as possible during the data collection phase. These strategies included provision of the researcher's mobile phone number to caseworkers to assist with clarification of questions where necessary, allowing the caseworkers to assist the young person with questionnaire completion as requested and follow-up of consenting participants. Although the overall number of participants consenting to the questionnaire study was low ($n = 16$) this number represents 47% of clients in treatment during the data collection period.

There were no missing data in the collected questionnaires from ASOs, caseworkers and clinicians. Only nine caregiver questionnaires were returned, which reflects the number of ASOs in Departmental care who did not have a consistent caregiver, and older youths who could give their own consent and did not have parental involvement. One caregiver pack was returned with only some of the included questionnaires completed. Questionnaires that were completed were included in analyses as appropriate.

Probably due to the small sample size, a number of the variables failed to meet assumptions of normality. Consequently, where possible, correlations were performed using Spearman's correlation coefficient (r_s) as whilst they are less powerful than parametric methods if assumptions are met, Spearman's correlation coefficient is less likely to yield distorted results when assumptions fail (Field, 2005). No transformations were performed.

Questionnaire Reliability and Validity

Internal consistency was computed for all questionnaires. Cronbach's alphas are reported in Table 4. Most internal consistencies were acceptable. The internal

consistencies of the ASO and Caregiver self-rated Engagement Measures were somewhat low, however the measure had good convergent validity with other measures of therapeutic relationship (see Measures).

Table 4

Internal consistency of ASO and Stakeholder Engagement Measures

Questionnaire	ASO (<i>n</i> = 16)	Caregiver (<i>n</i> = 8)	Caseworker (<i>n</i> = 16)	Clinician (<i>n</i> = 16)
Engagement Measure (rating young person)	.53	.86	.88	.88
(rating self)	-	.51	.75	-

Engagement Measure and Impulsivity/Antisociality

Given that impulsivity/antisociality was significantly predictive of TE in Study One, the relationship between impulsivity/antisociality and TE was also examined in Study 2. Strong negative correlations were found between impulsivity/antisociality and TE ($r_s = -.63, p < .01$).

Congruence of ratings of ASO Therapeutic Engagement by multiple informants

The congruence of ratings of the ASO's level of TE as rated by multiple informants was examined. An initial examination of the TE means presented in Table 5 indicated that ASOs and caregivers tended to rate the ASOs' TE somewhat higher than did caseworkers and clinicians.

Table 5

Means, Standard Deviations (SD) and Range of Therapeutic Engagement Measures

Measure	Rater	N	Mean	SD	Range
ASO TE	ASO	16	37.56	4.08	29-44
	CG	9	37.89	4.54	28-43
	CW	16	33.69	5.24	25-40
	C	16	35.13	5.82	26-45
ASO satisfactory goal progress	C	16	3.56	.96	2-5
ASO impulsivity/antisociality	C	16	6.06	4.52	1-14
Caregiver TE	CG	9	39.89	2.67	36-45
Caseworker TE	CW	16	40.25	3.53	30-45

Note: ASO = Adolescent Sexual Offender, CG = Caregiver, CW = Caseworker, C = Clinician.

Due to the violation of assumptions of an ANOVA, a Kruskal-Wallis analysis was conducted on the four ratings of ASO TE (ASO, caregiver, clinician, caseworker) which found no significant differences between ratings of ASO TE by various raters ($H(3)=5.97, ns$). The four ratings of ASO TE were then examined using correlational analyses (Spearman's rho) and results are presented in Table 6.

Table 6

Therapeutic Engagement of ASOs rated by ASOs, caseworkers, clinicians and caregivers

Ratings of ASO Therapeutic Engagement	2.	3	4.
1. ASO	-.01 _b	.55 _a *	.53 _a *
2. Caregiver		-.27 _b	.18 _b
3. Caseworker			.69 _a **
4. Clinician			

^a $n = 16$. ^b $n = 9$.

Strong positive correlations were found between ratings of ASO TE by the ASO and ratings of ASO TE by the caseworker ($r_s=.55, p<.05$), and clinician ($r_s=.53, p<.05$). In comparison, studies have found that client and therapist versions of the WAI (a measure of therapeutic alliance) are not highly correlated (e.g. therapist and client WAI correlation, $r = .09$, observer and client WAI, $r = -.18$, Tichenor & Hill, 1989). A strong positive correlation was found between ratings of ASO TE by the clinician and the caseworker ($r_s=.69, p<.01$). Correlations between caregiver ratings and ratings by other informants were weak and non-significant. As shown in Table 5, caregiver ratings showed a similar range of scores to the ASOs, however examination of the data indicated that the ratings of caregivers were skewed towards higher ratings of ASO TE, whilst the distribution of ratings by other informants reflected scores varying along a normal curve.

Association between Therapeutic Engagement of Caregivers and Caseworkers and ASO Therapeutic Engagement and Therapeutic Outcomes

A comparison of the means in Table 5 indicated that caseworkers and caregivers rated themselves as being more highly engaged in treatment than did ASOs. A Kruskal-Wallis test was conducted on the TE ratings of ASOs, caregivers and caseworkers, which indicated a trend towards significance ($H(2) = 5.13, p = .08$).

As Table 7 shows, weak relationships were found between the TE of the caregiver, caseworker and ASO. However, there was a strong positive relationship between caregiver TE and ASO Satisfactory Goal Progress ($r_s = .94, p < .01$).

Table 7

Correlations between self-rated therapeutic engagement of ASOs, caseworkers and caregivers, and ASO goal progress

Measure	2	3	4
1. ASO TE	.11 _b	.20 _a	.01 _a
2. Caregiver TE		-.07 _b	.94 _b **
3. Caseworker TE			.10 _a
4. Satisfactory Goal Progress.			

^a $n = 16$. ^b $n = 9$.

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

Caregiver Involvement

The presence or absence of an identified caregiver (as indicated by return of the caregiver questionnaire) was used to examine whether there were any differences in ASO TE or satisfactory goal progress, based on caregiver involvement. Six cases had no identified caregiver. A Kruskal-Wallis test found no significant differences between ASOs with caregivers and those without, in relation to Satisfactory Goal Progress and TE ($H(1) = 1.56, ns$).

Discussion

Study 2 aimed to examine whether key stakeholder's perceptions of ASO TE were consistent with the ASO's own perception of their TE. Findings indicated that clinicians and caseworkers rated ASOs TE similarly to the ASO's own TE ratings. However, caregiver ratings of ASO TE were not significantly correlated with the ASO's ratings of their own TE or with ASO TE as rated by the ASO's clinician and YJSO caseworker; however it is likely that these results were affected by small caregiver sample size.

One of the principles of multisystemic treatment models is the involvement of key stakeholders within the adolescent's environment in the adolescent's treatment. The findings of Study 2 indicated no significant relationship between caregiver and YJSO TE and ASO therapeutic engagement. However, caregiver TE was strongly correlated with clinician-rated ASO satisfactory goal progress in treatment. These findings indicate that caregiver TE may influence the ASOs therapeutic outcomes through processes external to the ASOs TE in treatment.

Small sample sizes are one of the limitations of research with a relatively low prevalence population such as adolescent sexual offenders. Sample size was further restricted as only ASOs and their caregivers who consented to participate in Study 2 could be studied with regards to TE, although this issue is common to studies of TE. Study 2 sample size therefore restricted the type of analyses which could be utilised, and may also have inflated risk of Type I error due to the number of analyses. However, research specifically examining TE in ASOs is sparse and it is important that the methodological limitations be balanced against the importance of contributing to ASO treatment research and clinical knowledge. Furthermore, the current study also improved upon previous research in this area through use of measures specifically

designed to assess TE rather than reliance upon attendance or treatment dropout, which may not be reliable indicators of TE in mandated treatment populations.

The findings of Study 2 may provide indications as to areas warranting of further investigation, particularly in relation to the involvement of caregivers in relation to treatment outcome, and the utility of clinician-rated measures of ASO TE in mandated treatment populations. For example, the correlations between ASO and clinician-rated measures of TE may suggest that clinicians may be able to use measures of TE to accurately detect when the ASO is not feeling engaged in treatment, and adjust their use of engagement strategies accordingly.

Notably, impulsivity/antisociality was again associated with poor ASO therapeutic engagement, as in Study 1. As identified in the discussion of Study One, impulsivity/antisociality has been associated in previous research with treatment dropout. A number of individual-level explanations have also been offered to account for the relationship between impulsivity/antisociality and poor TE, which are outlined in Study One, and described in Chapter 9 in the General Discussion. In relation to Study 2, the current findings suggest that the ASO retains a level of independence from their caregiver and caseworker with regards to their level of TE. One possible explanation for this finding may be the adolescent's developmental stage, which promotes independence from their caregivers and authority figures. Alternatively, clinicians may find it easier to engage with adult caregivers and caseworkers than with an ASO with high levels of impulsivity/antisociality. This explanation would suggest that clinicians may need to tailor their engagement strategies to ASOs with high levels of impulsivity/antisociality, and possibly seek more directive, practical support from key stakeholders to support the young person's engagement in treatment.

The current study was also able to examine a number of aspects of TE in relation to the ASO and key stakeholders within a multisystemic ASO treatment model, however

no direct relationship between caregiver or caseworker TE was associated with the ASO's level of TE in the current study. Study 3 examines the potential influence of other aspects of stakeholder involvement within a multisystemic treatment model that may impact on ASO TE and treatment outcomes. Specifically, Study 3 examines the influence of a collaborative treatment model on the collaborative treatment partner's level of knowledge, skills and confidence. Study 3 also examines the relationship between the collaborative partners' level of knowledge, skills and confidence and ASO TE and satisfactory progress towards treatment goals.

CHAPTER 7

Improving Therapeutic Engagement through
Collaborative Treatment Partnerships (Study 3)

In Study 1, a number of characteristics were found to be associated with poor therapeutic engagement (TE) with adolescent sexual offenders (ASOs), namely, a history of conduct disorder, poor peer relationships (isolated or delinquent) and Indigenous background. As discussed in Study 1, reasons posited for the poor TE with Indigenous clients included their remote locality and related difficulties in consistent treatment provision.

Queensland is a large geographical region, a state which has a surface area of 1.73 million km². Brisbane-based referrals represent only 12.7% of referrals to the treatment program with the remainder derived from regional, rural and remote regions throughout the State (Rayment-McHugh et al. 2006). In practice, the provision of assessment and treatment to regional, rural and remote regions is constrained by low staff numbers, travel expenses and distance. For example, to reach a rural location may require up to nine hours travel by car, whilst visits to far remote regions may require multiple flights and boat travel, and be further hampered by transport availability. Thus, clients in non-metropolitan regions do not receive the equivalent amount of direct contact with treatment program staff as metropolitan clients. Rayment et al. (2006) identified a number of additional challenges to treatment provision which result from the metropolitan-based service providing treatment to regional, rural and remote areas of Queensland. These challenges include knowledge deficits regarding local contextual issues, local resources and networks, and limited ability to provide support between sessions or during a crisis.

In part to overcome these challenges, clinicians developed a collaborative multisystem treatment model (CMTM), a field-based case assessment and treatment model. Similarly to other multisystemic treatment models (e.g. Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 1998), the CMTM draws on social-ecological and systems theories, empirical research related to adolescent offenders (including sexual offenders) and evidence-based intervention techniques. The CMTM differs from other multisystemic treatment models in that although the clinician maintains primary responsibility for identification of treatment goals, overall planning and intervention, the CMTM also involves the recruitment of local professionals, paraprofessionals and non-professionals, as well as family members and community members, to assist in delivering interventions to the client (for a full description of the CMTM, refer to Chapter 2). The benefits of this model have been identified as providing treatment continuity without relying on frequent appointments with a specialist clinician; broader engagement with the ASOs local environment (e.g. facilitating community-level prevention initiatives where appropriate); and building capacity of local professionals and paraprofessionals to intervene with ASOs.

The effectiveness of CMTM is reliant on the ability of the Collaborative Treatment Partner (CTP) to assist with delivery of interventions, and hence the CTP must have the necessary knowledge, skills and confidence to work with ASOs. The treatment program therefore provides training workshops for potential CTPs. These workshops have been found to be associated with self-rated increases in skills, knowledge, confidence and willingness to work with ASOs, with improvements being maintained at three month follow up (Dadds, Smallbone, Nisbet & Dombowski (2003). However not all potential CTPs are able to attend training workshops within a timeframe practicable for when client treatment will occur (due limited workshop availability or remote locations of CTPs), therefore a range of other capacity-building

activities are incorporated into the CMTM, including case collaboration, professional supervision, provision of resource materials and observational opportunities. Other models which have used collaborative partnerships to enhance treatment delivery have shown variable results. Perkins, Roberts, Sanders and Rosen (2006) examined the effectiveness of a consultation-style model to enhance mental health services in remote New South Wales, resulting in increased access to a psychiatrist and community mental health care, although outcomes were not assessed. Donoghue et al. (2004) studied the effectiveness of training non-specialist professionals in aspects of Cognitive Behavioural Therapy (CBT) treatment delivery and found that whilst the non-specialist professionals reported improvements in CBT skills, they lacked the confidence and competence to translate the skills into practice. Study 3 examines the effectiveness of the CTP relationship within the CTM in enhancing CTP's knowledge, skills and confidence in working with ASOs.

A range of collaborative models have been trialled to address issues of distance or professional resource scarcity with varying effectiveness with regards to client TE and therapeutic outcomes. Kerfoot et al. (2004) studied whether trained social workers could provide cognitive behaviour therapy to adolescents with depression thereby improving client outcome. The study found low rates of therapy completion (45% attended 4 or greater of 8 scheduled sessions), and no significant differences in depressive symptoms between adolescents who had been allocated to social workers providing CBT treatment versus those who had received social worker treatment as usual. A similar study where CBT was conducted by mental health professionals found 24 out of 26 adolescents attending 4 or greater sessions (Wood, Harrington & Moore, 1996). A number of studies have examined the success of training "non-traditional" mental health providers (e.g. nurses) to deliver evidence-based psychological interventions. Early studies indicated that mental health professionals (predominantly

nurses) could be successfully trained to deliver psychological interventions such as family interventions resulting in improved outcomes for patients with schizophrenia and their caregivers (Brooker et al., 1994; Lancashire et al., 1997). However, when follow-up studies of the mental health professionals have been conducted, implementation of psychological interventions by these professionals were low (e.g. Kavanaugh et al., 1993; Mairs & Bradshaw, 2005). A model using a blend of specialist and local resources to deliver treatment (psychiatric services) in rural areas has also been used with effect in an indigenous population (Laugharne, Glennen & Austin, 2002). The study found a decrease in both psychiatric hospital admissions (58% fewer) and outpatient visits (58% fewer) in comparison to the previous year. Study 3 aimed to examine the effectiveness of the CMTM in enhancing ASO TE and achieving identified treatment goals.

Study 3 aimed to address the following research questions:

1. Is CMTM associated with improved knowledge, skills and confidence in working with ASOs?
2. What do CTPs perceive as the obstacles and benefits associated with the CMTM?
3. Are CTP knowledge, skills and confidence postcollaboration associated with TE?
4. Are CTP knowledge, skills and confidence postcollaboration associated with ASO TE and/or therapeutic outcomes?

In light of the negative relationship between ASO TE and impulsivity/antisociality found in Studies One and Two, the relationship between these variables and CTP knowledge, skills and confidence will also be examined in the current study.

Method

Participants

De-identified data from 35 CTPs were matched with de-identified data from 35 ASO cases (CTPs were matched with the corresponding ASO for whom they provided treatment assistance). The data from the 35 CTPs comprised the total number of community partners who collaborated with the treatment program during two six month periods, from January to June 2006, and from January to June 2007. CTPs were 35 Youth Justice caseworkers (typically qualified social workers or psychologists or youth workers, who usually do not possess university qualifications). Data from 35 court-referred male ASOs who had participated in treatment during the two specified time periods were included in the study. All ASOs were referred to the treatment program for either a presentence report or a presentence report and subsequent counselling. Ages of ASOs at referral ranged from 12-17 years ($M = 14.83$; $SD = 1.50$). With regards to the residential location of the ASOs in the sample, eight resided in Metropolitan regions, 23 in regional cities/centres, one in a rural area, and one in a remote area. Areas were defined according to population size, and travel distance from the capital city where the treatment service was based. Metropolitan regions were defined as areas located within the capital city and surrounding areas (characterised by a high population, and accessible to the treatment service by car travel). Regional cities/centres had a relatively high population and were accessible by few hours of air travel. Rural areas had a small and discrete population, and required approximately half a day of air travel to access. Remote areas required at least one day of travel to access, were isolated and had a small, discrete population.

Measures

Therapeutic engagement. The ASO's degree of TE in therapy sessions was rated by their clinician on a single-item, 7-point scale (1 = Not at all engaged in therapy to 7 = extremely engaged in therapy) as used in Faw et al. (2005). Acceptable interrater reliability ($ICC = .77$) and convergent validity has been reported for this measure in a sample of adolescents in MDFP-based substance abuse counselling (Faw et al., 2005). Clinicians rated clients based on six months of treatment (January-June 2006).

Satisfactory goal progress. Each client is required to complete a number of therapeutic goals as part of their treatment (e.g. development of a relapse prevention plan). Clinicians rated whether the client was making satisfactory progress toward achieving their therapeutic goals, taking into account their stage in treatment. Progress was rated on a 5-point scale (1 = No Progress, 2 = Some Progress, 3 = Satisfactory Progress, 4 = Good Progress, 5 = Excellent Progress). Clinicians rated clients based on six months of treatment.

Demographic variables. Variables such as indigenous status and client locality were obtained from official information collated in the treatment program clinical computer records. Indigenous status of clients was recorded as a dichotomous variable: (1 = Indigenous or 0 = Non-Indigenous).

Sexual Drive/preoccupation, impulsivity/antisociality, intervention and community stability. These constructs were measured using the four scales of the Juvenile Sex Offender Assessment Protocol –II (J-SOAP-II), and were included to examine the potential relationship between variables related to risk and TE. The Sexual Drive/Preoccupation Scale (8 items) assesses previous offences, victims, planning, sexual aggression and drive. The Impulsive/Antisocial Behaviour Scale (8 items) assesses caregiver consistency, anger, behaviour/conduct problems, charges/arrests, types of offences, and experience of physical abuse/violence. The Intervention Scale (7

items) assesses degree of accepted responsibility for the offences, motivation for change, risk management strategies, empathy, remorse/guilt, cognitive distortions and peer relationships. The Community Stability/Adjustment Scale assesses management of sexual urges and anger as well as living situation, school and support systems. Refer to Chapter 5 (Measures for a full description of this measure).

GYFS Collaborative Partner Questionnaire (GCPQ). The GCPQ (formerly GAFATC) Skills Questionnaire (GSQ; Dadds, et al. 2003). GSQ was originally designed to assess an individual's self-rated level of confidence, knowledge, resources, and skills related to working with adolescent sex offenders. The GSQ is an eight-item measure with responses rated on a 5-point Likert scale (1 = not at all confident/no knowledge and 5 = extremely confident/extensive knowledge). Dadds et al. (2003) reported a Cronbach's alpha of .84 for the GSQ, indicating good scale reliability. Example items of the GSQ are: "How confident are you right now in your abilities when working with adolescents who sexually offend?" "How much knowledge do you have right now about the treatment of adolescents who sexually offend?" and "At present, How comfortable/at ease are you when dealing with adolescents who commit sexual offences."

The GSQ was adapted for the current study through the inclusion of the phrases "prior to your collaborative work with GYFS" which formed the PreGYFS questionnaire and "after your collaborative work with GYFS" which formed the PostGYFS questionnaire. For example,

(Pre) "1. How confident were you prior to your collaborative work with GYFS in your abilities when working with adolescents who sexually offend?"

(Post) "1. How confident are you right now (after your collaborative work with GYFS) in your abilities in working with adolescents who sexually offend?"

A number of additional questions were included in the GCPQ to assess perceived obstacles to, and benefits of, working from the CMTM. CTPs were asked to rate the extent to which each of seven factors has presented obstacles to working from the CMTM. Potential obstacles assessed are: time constraints, lack of confidence, limited resources/staffing, insufficient training, workload demands, confidentiality, and collaborative partners who fail to complete agreed tasks. CTPs were also asked to rate the extent to which each of seven factors were considered to be benefits of working from a collaborative treatment model. Potential benefits assessed were: ensure local contextual issues inform assessment and treatment planning, promote a more expedient therapeutic process, enhance the skills and knowledge (capacity) of individual practitioners and promotes a sharing of resources, increases the local support network of young people, more regular support and treatment for young people, reduces travel requirements, builds community capacity. Each item is rated on a 5-point Likert scale (1 = Not at all and 5 = A great deal).

The GCPQ includes three additional questions targeting the general outcomes of the CMTM: 1) The extent to which the collaborative partnership enhanced outcomes for the client; 2) The extent to which the partner had transferred knowledge and skills from the partnership to work with other clients; 3) the willingness of the partner to work collaboratively with GYFS in the future. Again, these items were rated on a 5-point Likert scale.

CTPs completed pre and postcollaboration questionnaires of the GCPQ at a single time point, using a retrospective pretest methodology. Hill and Betz (2005) and Pratt, McGuigan and Katzev (2000) recommend that a retrospective pretest (rather than a true pretest) be used in study designs which assess the subjective experience of change in participants as it is most likely to counter the response shift related to the informants' changed standards of measurement after an intervention. Specifically, it has been

suggested that using a true pretest-posttest procedure is biased by a response shift, as the respondent will rate their posttest measure using a different metric to their pretest measure as a result of the knowledge they have gained from the intervention itself. Retrospective pretests have been shown to be viable alternatives to traditional pretests in many situations (e.g. program evaluation, bereavement outcomes, self-rated health status, and organisational settings) (Hill & Betz, 2005; Kreulen, Stommel, Gutek, Burns & Braden, 2002).

Procedure

Data for the current study was collated from two sources. Firstly, all data except the TE and YJSO ratings were obtained from a clinical database which collates information from official records and clinical files, and routinely administered client measures. Information for each ASO is recorded in the database using a coded identification number.

The second source of data was obtained from an annual quality assurance telephone survey conducted by treat program research staff who had no role in the professional activities of the treatment service and had no prior or ongoing contact with participants. The modified GCPQ is used for the survey. The purpose of the survey is to obtain feedback from CTPs about the CMTM, and to evaluate the CTP's level of knowledge and skill regarding the treatment of ASOs. CTPs were asked to rate their skill level prior to their collaborative experience and post their collaborative experience with the treatment service.

The sample was collected at two time points, July 2006 (with questions referring to the treatment period from Jan-June 2006) and July 2007 (with questions referring to the treatment period from Jan-June 2007). Program staff attempted to contact all CTPs who had participated in the CMTM for the specified time periods, resulting in contact

with 83% of identified CTPs in 2006 and 78% of identified CTPs in 2007. In the instance of the ASO having more than one CTP, information from the primary CTP was used for analyses. The questionnaire data were also recorded in a deidentified database.

Treatment program staff were requested by the present author to match the GCPQ data from each CTP with the data from the ASO to whom the CTP was delivering treatment. All de-identified information was compiled into a complete database, and analysed to compare CTP self-ratings of their knowledge, skills and confidence pre and post collaboration. Also, data were analysed to examine correlation of CTP variables with ASO TE and outcome variables.

Results

Sample Characteristics

Of the 35 community partners who completed the GCPQ, 8 were located in Metropolitan regions, 23 worked in Regional Cities or Centres, 1 in a Rural Area and 3 in a Remote area. The number of hours spent working in a collaborative model with the ASO varied widely from 0 to 101 during the period of the survey. The mean duration of time spent working in collaborative activities was 36.49 ($SD = 30.09$; range 0-101 hours, $n = 35$). Table 8 presents the number of hours spent working in collaborative activities according to the region of the CTP. Indigenous clients comprised 25% of the cases in the Metropolitan region, 26% of Regional City/Centre cases and 100% of the Rural and Remote region cases.

Table 8

Collaborative Treatment Partner location and hours spent working in a collaborative model

Region	N	(%)	Mean (hours)	SD	Range
Metropolitan	8	(22.86%)	38.75	31.34	8-101
Regional Cities/Centres	23	(65.71%)	34.87	28.54	0-101
Rural	1	(2.85%)	50	-	-
Remote	3	(8.57%)	38.33	-	6-100

The sample of male ASOs ($n = 35$) included 13 Indigenous (36%) and 12 Non-Indigenous youth (64%). The residential regions of the ASOs in the sample directly correspond to the CTP locations reported in Table 8. Specifically, of the ASOs in the sample, eight resided in Metropolitan regions, 23 in regional cities/centres, one in a rural area, and one in a remote area. Mean age at referral was 14.83 years ($SD = 1.50$) with ages ranging from 12 to 17 years. One (3%) had a prior history of sexual offences, and 7 (20%) had a prior history of non-sexual offences. There were no significant differences between Indigenous and Non-Indigenous ASOs on any of the scales of the JSOAP-II. There were no significant differences between Indigenous ASOs ($M = 4.83$) and Non-Indigenous ASOs ($M = 5.43$) with regards to TE, nor with regards to satisfactory goal progress ($M = 3.42$ and 3.35 , respectively). There were also no significant differences between Indigenous ASOs and Non-Indigenous ASOs with regards to the GYFS Skills measure.

Power

Power calculations were determined using Cohen (1988) and confirmed using G*Power 3.0.10 (Faul, et al. 2007). All power calculations use $\alpha = .05$. Results from this study should be interpreted with caution as a sample size of 54 would be required to have adequate power to detect medium effect sizes (0.15), meaning the analyses have a greater risk of Type II error. One-way ANOVA power calculations (two groups) with a sample size ($n = 17$) had a power of .60 to detect medium effect sizes (0.25).

Data Screening

Missing data was very low due to the routine collection of this data and telephone interview format of the GCPQ. Complete data were available for all variables.

Scale 4 of the JSOAP-II is not completed if the ASO is in detention. The latter two factors resulted in 1 case of missing data for Scale 4 of the JSOAP-II.

All variables were examined to ensure that ranges fell within valid parameters. Analyses were conducted using SPSS version (14.0) (SPSS Inc, 2005). Data were screened for missing values, outliers, skewness and kurtosis.

CTP hours was found to have two outliers prior to conducting the analyses. In order to reduce the influence of the outliers, the two extreme scores were both modified to a score that was one unit larger than the next most extreme score, in accordance with Tabachnick and Fidell (1996) and Field (2005). The descriptive information for this variable reports the original data.

Reliability and Validity

GYFS Skills Measure. The internal consistency of the GYFS Skills measure was assessed for the eight Precollaboration and eight Postcollaboration items resulting in Cronbach's alpha of .91 for the Precollaboration Questionnaire and .81 for the Postcollaboration Questionnaire. These scores indicate good internal consistency for both pre and post questionnaires (Nunnally & Bernstein, 1994). Internal consistency scores are similar to those reported by Dadds et al. (2003).

The internal consistency of the seven items assessing obstacles to a collaborative model was $\alpha = .48$. The internal consistency of the seven items assessing benefits of a collaborative model was .60. The relatively low internal consistencies of these scales probably reflect the range of potential obstacles or benefits to the CMTM as low internal consistency is to be expected for checklist-type instruments, however, as higher scores on each scale would still reflect a greater number of obstacles or benefits, total scores have been used in analyses.

Therapeutic Engagement and Satisfactory Goal Progress. TE and Satisfactory Goal Progress measures were selected as indicators of TE and outcome, respectively. There was a large positive correlation ($r = .63, p < .01$) between satisfactory goal progress and TE. There was a moderate negative correlation between ASO TE and missed GYFS sessions ($r = -.38, p < .05$), indicating that poor TE was associated with a higher number of missed sessions. The direction of the correlations provide support for the construct validity of the measure of TE.

CMTM and CTP Knowledge, Skills and Confidence

The current study examined whether training and collaboration CMTM was associated with improvements in CTP self-reported ratings of their knowledge and skills regarding ASOs. Table 9 presents means and standard deviations for the GYFS Skills Questionnaires for pre and postcollaboration.

Table 9
Means, Standard Deviations (SD) and Range of Collaboration, ASO therapeutic engagement and risk variables (N = 35)

Variable	Mean	SD	Range
GCPQ			
Precollaboration Questionnaire	18.74	6.31	8-37
Postcollaboration Questionnaire	29.83	4.09	13-35
Total benefits	29.51	3.56	22-35
Total obstacles	17.26	3.77	9-23
Outcome Measures			
Therapeutic engagement	5.23	1.61	2-7
Satisfactory goal progress	3.37	1.03	1-5
Age at referral	14.83	1.50	12-17
J-SOAP-II (Risk)			
Sexual Preoccupation	4.54	3.12	0-11
Impulsivity/antisociality	7.26	4.47	0-16
Intervention	7.37	3.18	1-14
Community Adjustment (n = 34)	3.47	2.48	0-9

An examination of the means indicated that CTPs reported higher skill levels at postcollaboration than precollaboration, with scores on the skills questionnaires significantly higher postcollaboration than precollaboration, $t(34) = -10.89, p < .01$. Post hoc power calculations found that the analyses had a power level of 0.99, indicating sufficient power to detect effects.

Obstacles to and Benefits of the CMTM

CTPs were asked to rate the extent to which various factors had presented obstacles to working from a collaborative treatment model. CTPs were also asked to rate the benefits they had experienced from working from a collaborative treatment model.

Obstacles to working from a collaborative treatment model. The reported means and standard deviations of the reported obstacles to using a collaborative model are reported in Table 10. Examination of the means shows that CTPs reported that systemic factors such as limited resources, workload demands and time constraints were the greatest obstacles to working within a collaborative treatment model. Factors such as confidentiality and lack of confidence were generally not rated as obstacles.

Table 10
Obstacles to treatment reported by Collaborative Treatment Partners at Postcollaboration

Obstacle	PostGYFS Collaboration	
	Mean	SD
Limited Resources/Staffing	3.17	1.13
Workload Demands	3.11	1.19
Time constraints	2.97	1.08
Insufficient Training	2.58	1.20
Collaborative partners who fail to complete agreed tasks	2.14	1.27
Lack of confidence	1.83	.88
Confidentiality	1.61	.96

Note. Scores ranged from 1 = Not at all, to 5 = A great deal

There was a moderate negative correlation between CTP post collaboration skills and perceived obstacles to using a collaborative model ($r = -.37, p < .01$, see Table 11). Thus, CTPs who perceive fewer obstacles to using a collaborative model may have greater confidence in their skills with working with young people who sexually offend. Alternatively, CTPs who have higher confidence in their skills in working with young people may perceive fewer obstacles to using a collaborative model in working with young people.

Table 11

Correlations between ASO therapeutic engagement, goal progress, GYFS Skills Measure and JSOAP-II scales (N = 35)

Variable	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. ASO TE	.64**	-.41*	-.04	.23	.14	.05	-.07	-.07	-.32	-.20	-.31
2. Satisfactory goal progress		-.26	-.18	.03	.09	-.06	.02	-.03	-.38*	-.15	-.28
3. Missed sessions			-.06	-.23	-.07	-.25	.03	.09	.23	.26	.14
4. CTP hours				-.00	.26	-.15	.12	.41*	.31	.05	.20
5. PreCMTM skills					.39*	-.04	-.06	.25	.11	.16	.01
6. PostCMTM skills						-.37*	.25	.20	-.04	.12	-.21
7. Obstacles							.05	-.10	.07	-.23	.09
8. Benefits								-.33	-.06	-.02	-.15
9. Sexual preoccupation									.49**	.46**	.35*
10. Impulsivity/antisociality										.60**	.54**
11. Intervention											.41*
12. Community adjustment											

* $p < .05$, ** $p < .01$

Benefits of working from a Collaborative Treatment Model. The means and standard deviations for the ratings of the various benefits of the collaborative model items are presented in Table 12. CTP ratings of the benefits of working from a collaborative model were all positive with almost all ratings falling between “somewhat” and “a great deal.” The main reported benefits of working from a collaborative treatment model were: enhanced skills/knowledge, more regular support/treatment, and a more expedient therapeutic process. CTPs indicated that the CMTM did not reduce travel requirements.

Table 12

Benefits of working from a collaborative model reported by Collaborative Treatment Partners at Postcollaboration

Obstacle	Postcollaboration	
	Mean	SD
Enhances skills/knowledge	4.64	.49
More regular support/treatment	4.58	.65
More expedient therapeutic process	4.44	.74
Increases local support network	4.36	.83
Local context informs treatment	4.33	.68
Builds community capacity	3.97	1.13
Reduces travel requirements	3.08	1.59

Note. Scores ranged from 1 = Not at all, to 5 = A great deal

A t-test was performed on total obstacles and total benefits to determine whether CTPs were reporting greater obstacles or benefits to using the CMTM. Results of the t-test indicated that CTPs reported significantly greater benefits than obstacles to using a collaborative treatment model ($t(34) = 14.34, p < .01$). Post-hoc power calculation for this analysis had a power level of 1.0, indicating adequate power to detect effects.

CTP Knowledge, Skills and Confidence and ASO Therapeutic Engagement and Outcomes

The current study also examined whether the level of self-reported CTP skills and knowledge (*GCPQ*) was associated with the level of TE of the ASO. There was a

moderate positive correlation between the level of postcollaboration skills and the CTP's belief that the collaborative model enhanced outcomes for their client ($r = .42$, $p < .05$). However an examination of the relationships between postcollaboration skills and variables reflecting ASO TE and Satisfactory Goal Progress showed only weak correlations (See Table 11). Postcollaboration CTP skills and was found to have weak correlations with ASO TE ($r = .14$, ns) and missed sessions ($r = -.07$, ns). With regards to therapeutic outcomes, only a weak relationship was found between postcollaboration CTP skills and satisfactory goal progress.

CTPs reported a number of changes in their work practices as a result of the CMTM. Postcollaboration skills scores were moderately correlated with CTP reports of changing their work with other clients following their involvement in CMTM ($r = .35$, $p < .05$). These findings may indicate that CTPs may extend the knowledge and skills gained as a result of the collaborative model to their other (non-ASO) clients.

ASO Risk, Therapeutic Engagement and Satisfactory Goal Progress

The final analysis examined whether variables associated with ASO reoffense risk (J-SOAP-II Scales) were associated with ASO TE. Only weak negative correlations were found between the sexual preoccupation and intervention scales and ASO TE. However, a moderate negative correlation was found between ASO TE and impulsivity/antisociality ($r = -.32$, $p = .058$). A moderate negative correlation was also found between ASO TE and community adjustment ($r = -.31$, $p = .079$). With regards to therapeutic outcomes, there was moderate negative correlation between impulsivity/antisociality and satisfactory goal progress ($r = -.38$, $p < .05$).

Findings indicated a negative relationship between impulsivity/antisociality and both TE and satisfactory goal progress. The relationships between CTP postcollaboration skills and TE and satisfactory goal progress were examined after

controlling for impulsivity/antisociality using partial correlation however relationships remained weak.

Indigenous Status

The findings of Study 1 indicated that Indigenous status was the strongest predictor of ASO TE in the ASO treatment program. A one-way ANOVA in the current study failed to find significant differences between Indigenous and non-Indigenous ASOs with regards to TE and satisfactory goal progress, however these findings should be interpreted with caution due to the relatively small sample size.

Discussion

Study 3 aimed to examine a number of aspects of a collaborative ASO treatment model (CMTM), and the relationships between ASO TE and outcomes. Specifically, Study 3 examined whether a collaborative treatment model (CMTM) was associated with improvements in CTP knowledge, skills and confidence in working with ASOs. Findings indicated that CTPs reported significant improvement in their level of knowledge, skills and confidence in working with ASOs postcollaboration. In addition, CTPs reported significantly greater benefits than obstacles to the CMTM in working with ASOs.

Study 3 also examined whether CTP knowledge, skills and confidence postcollaboration was associated with ASO TE or therapeutic outcomes. CTP knowledge, skills and confidence postcollaboration was significantly associated with the belief that a collaborative model improved outcomes for ASOs. However, the study only found weak relationships between CTP knowledge, skills and confidence postcollaboration and either TE or satisfactory goal progress of ASOs.

Moderate negative relationships were found between impulsivity/antisociality and both TE and satisfactory goal progress of ASOs. This finding was consistent with the previous research reviewed in this thesis, which identified that the most consistent predictor of treatment dropout with regards to adolescents was conduct/externalising problems. There was also a negative moderate correlation between impulsivity/antisociality and community adjustment. These findings indicate the relationship between individual factors and ASO TE, despite CTP self-reported increases in knowledge, skills and confidence in working with ASOs. Adolescents with high levels of impulsivity/antisociality may find it more difficult to engage in the behaviours required within traditional therapeutic relationships (e.g. remembering to regularly prioritise and attend appointments, homework, etc) and may therefore require a higher level of support. These results may indicate that increased CTP skills may not be sufficient to enhance TE, and that efforts to therapeutically engage ASOs in treatment may require intervention with regards to specific individual variables (e.g. impulsivity/antisociality) and addressing community level variables which may be acting to exacerbate issues associated with these traits.

Although data from most CTPs during the study period were included in the analysis the total sample size of Study 3 was small and therefore limited the power of the analyses to find true effects. In order to enhance clinician completion rates, single-item measures of TE and satisfactory goal progress were used rather than standardised measures which may have greater reliability and validity. However, single item indicators of TE have been used successfully in other research (e.g. Faw et al., 2005) and findings are likely to reflect global ratings of these constructs. Furthermore, the influence of remoteness of location on TE could not be examined in the current study due to low sample numbers and would therefore be an interesting area for future research.

Study 3 indicated the use of a collaborative treatment model can benefit CTPs in improving their knowledge, skills and confidence in working with ASOs, however no relationship was found between CTP knowledge skills and confidence and ASO TE and satisfactory goal progress in the current study. Study 3 also provided further support for the negative relationship between impulsivity/antisociality and ASO therapeutic engagement, and indicated a similar negative relationship with therapeutic outcomes. Study 4 aimed to examine whether a treatment model which targeted improved TE of Indigenous and impulsive/antisocial ASOs could result in improved TE with these clients.

CHAPTER 8

Outcomes of Efforts to Improve Therapeutic Engagement (Study 4)

If the variables associated with poorer therapeutic engagement (TE) can be identified, interventions can then be tailored to meet the specific needs of resistant clients, theoretically resulting in improved TE. Study 1 examined multisystemic predictors of TE in a sample of court-referred adolescent sexual offenders (ASOs) who participated in a specialised treatment program between 2001 and 2005. Study 1 found impulsivity/antisociality, peer relationships, and Indigenous status to be associated with poorer TE, with impulsivity/antisociality and Indigenous status as significant unique predictors. Partially as a result of feedback of these results to the treatment service, the treatment intervention model was modified in an effort to improve TE with subsequently-referred clients, particularly with higher-antisocial youth and with Indigenous youth and their families.

These results were used as a focus for clinical efforts to improve TE particularly with higher-antisocial clients and with indigenous clients. In essence, these efforts included: 1) improving the knowledge, skills and confidence of collaborative treatment partners (CTPs) to work more effectively with higher-risk ASOs; 2) shifting the responsibility for TE to professionals, rather than to the ASO clients and their families; and 3) increasing the Indigenous cultural awareness and competence of clinical staff. A brief description of each of these areas of activity follows.

Given the critical role of CTPs in GYFS interventions, efforts to enhance TE included an increased focus on building the capacity of CTPs, particularly with respect to their TE skills with this client group. Capacity building efforts were focused specifically on the provision of formal training programs (see Dadds, et al. 2003) and (particularly when CTPs were unable to attend training workshops due to their remote

locations) on case consultation, professional supervision, opportunities to observe specialist clinicians, and the provision of written resources.

Shifting the responsibility for TE to professionals involved placing additional emphasis on assessing potential barriers to TE and on improving the problem-solving efforts by professionals to address these barriers. These strategies included: scheduling appointments for locations and times most convenient to the client; framing TE as a primary treatment goal; instructing clinicians to spend time building and enhancing TE on an ongoing basis; and recruiting CTPs identified by the ASO to assist with TE and with treatment delivery itself.

Efforts to further increase the cultural competence of clinical staff included: engaging a cultural consultant on a case by case basis, specific to the ASO's cultural heritage and community; engaging cultural supervision for clinical staff; increasing preparation and cultural knowledge-building prior to engagement with a young person and their community; building stronger relationships with individual Indigenous communities; and engaging Indigenous adults as CTPs to work directly with Indigenous clients. The aim of Study 4 was to evaluate these clinical efforts by examining TE in a second, independent cohort, testing for improvements by comparing TE ratings for the first (Study 1) and second cohorts.

Method

Participants

Information was obtained from 159 court-referred male ASOs who participated in a specialised treatment program between April 2001 and June 2009. All participants had been referred because they had either pleaded guilty or were found guilty of at least one sexual offense. Age at referral ranged from 11 to 18 years ($M = 15.5$; $SD = 1.27$).

Fifty six (35.2%) identified as indigenous Australians. Forty seven (29.6%) had a prior record of nonsexual offenses, and only two (1.4%) had a prior record of sexual offenses. Victim age for the index sexual offense ranged from 2 to 80 years ($M = 11.3$; $SD = 10.03$), with a median age of 9 years. Victim gender for the index offense was female in the majority of cases ($n = 105$, 79.6%).

Measures

Demographic and offence history. Demographic and offense history data were obtained from official information collated in the treatment program clinical computer records.

Data for all other variables examined in the present study including the *Therapeutic engagement* variable were measured as described in Study 1.

Sexual drive/sexual preoccupation and *Impulsivity/antisociality* were used to control for potential risk-related differences between the two cohorts, and to control for potential risk-related effects on TE. Psychometric properties of the J-SOAP-II have been reported in previous studies in the current thesis.

Procedure

All data except ratings of TE were obtained from official records and the treatment programs computer database. Five (1 male and 4 female) treating clinicians rated TE for the first cohort (Study 1; $n = 105$) between September 2004 and May 2005. This cohort included ASO clients who had participated in treatment between April 2001 and May 2005. Three (female) clinicians rated TE for the second cohort ($n = 54$), who had participated in treatment between June 2006 and June 2009.

For this second cohort, clinicians were blind to the second aim of the study (i.e. to evaluate clinical efforts to improve TE) until after their ratings were completed. Only

one of the three clinicians who rated the second cohort had been involved in the ratings for the first cohort. None of the clinicians themselves identified as Indigenous.

The clinical manager independently rated the TE of 16 ASO clients from the second cohort, on the basis of her personal knowledge of those cases and her supervision of the clinicians, for the purposes of measuring inter-rater agreement. The intra-class correlation co-efficient was .79 ($p < .001$), indicating good inter-rater agreement. A test for mean differences in TE ratings was not significant, showing the means for the clinicians ($M = 33.31$; $SD = 8.88$) and the clinical manager ($M = 33.06$; $SD = 6.97$) to be virtually identical. The original clinician ratings were used for the purposes of the analyses reported below.

Results

Cohort characteristics

Cohort 1 ($n = 105$) characteristics are fully described in Study 1. Cohort 2 ($n = 54$) included 23 Indigenous (42.6%) and 31 Non-Indigenous ASOs (57.4%). Mean age at referral was 15.44 years ($SD = 1.22$). Only one had a prior history of sexual offenses. Scores for sexual drive/preoccupation ranged from zero to 12 ($M = 4.08$, $SD = 3.48$), and for impulsivity/antisociality from 0 to 16 ($M = 7.48$, $SD = 4.55$). For this cohort Indigenous ASOs ($M = 9.39$, $SD = 4.22$) were rated higher than Non-Indigenous ASOs ($M = 5.97$, $SD = 4.00$) on impulsivity/antisociality, $t(52) = -3.04$, $p = .004$, but there was no difference in sexual drive/preoccupation.

Probably reflecting an increasing trend over time toward accepting referrals for higher-risk and higher-needs clients, ASOs in the second cohort were rated significantly higher than those in the first cohort on sexual drive/preoccupation, $t(157) = -2.24$, $p = .026$ (but not on impulsivity/antisociality). Too few complete YSR scores were available to examine internalising and externalising t-scores for cohort 2. As in Study 1,

TE was again rated lower for Indigenous ASOs ($M = 29.91$; $SD = 7.59$) than for Non-Indigenous ASOs ($M = 38.39$, $SD = 6.09$), $t(52) = 4.55$, $p < .001$.

For this second cohort, 11 ASOs (20%) were the subject of statutory breaches initiated by Youth Justice workers during the course of treatment, only one of which directly involved treatment-related concerns (failure to attend treatment appointments). Treatment was prematurely terminated by program clinicians in only two cases. One of these was known to have committed a new sexual offense, and the other's treatment was suspended for the purposes of further specialist (neuropsychology and audiology) assessment.

Improvements in therapeutic engagement

The results from Study 1, relating to ASO clients referred to GYFS between 2001 and 2005 (cohort 1), showed impulsivity/antisociality, peer relationships, and Indigenous status to be associated with poorer TE (correlation analysis). Multiple regression analysis of cohort 1 (see Study 1) identified impulsivity/antisociality and indigenous status as significant unique predictors. These results were used as a focus for clinical efforts to improve TE particularly with higher-antisocial clients and with Indigenous clients. The next step for the present study was to evaluate these clinical efforts by comparing TE for Indigenous and Non-Indigenous ASOs across the two cohorts.

Accordingly, a two-way ANCOVA, with cohort (cohort 1 vs. cohort 2) and Indigenous status (Indigenous vs. Non-Indigenous) as the independent variables, TE as the dependent variable, and impulsivity/ antisociality as the covariate was used to compare the two cohorts. Results are depicted in Figure 1.

The overall model was significant, $F(4,154) = 18.11$, $p < .001$. Significant univariate effects were found for cohort, $F(1,154) = 19.57$, $p < .001$, for Indigenous

status, $F(1,154) = 26.49$, $p < .001$, and for impulsivity/antisociality, $F(1,154) = 19.11$, $p < .001$. There was no significant interaction between cohort and Indigenous status. As depicted in Figure 1, the direction of change in TE indicated positive improvements for cohort 2.

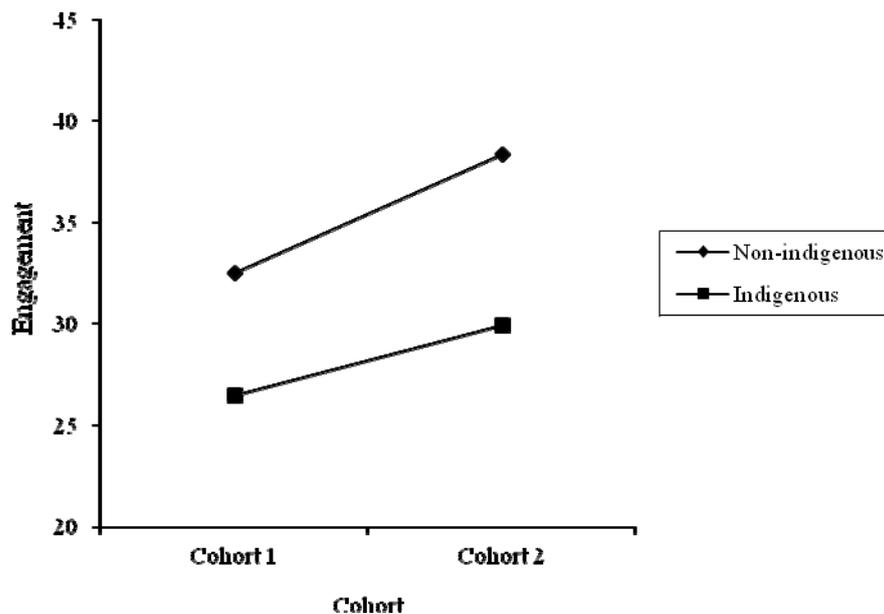


Figure 1. Improvements in TE for Indigenous and Non-Indigenous ASOs

Discussion

Study Four aimed to test for improvements in TE across two independent cohorts of ASOs. Study 1 results indicated that Indigenous race and impulsivity/antisociality were significant unique predictors of poorer TE, and subsequent efforts to improve TE therefore focused particularly on improving engagement with higher impulsive/antisocial ASO clients and with Indigenous ASO clients. Study 4 analyses, controlling for impulsivity/antisociality, showed significant improvements in TE with both Indigenous and Non-Indigenous ASOs, although clinical

staff remained comparatively less successful at engaging Indigenous vs Non-Indigenous youth. .

The present results suggest that the clinicians' efforts to improve TE with higher-antisocial ASOs and with Indigenous ASOs were at least partly successful. Study 4 analyses did not include a test for reductions in impulsivity/antisociality because the measure of this construct is a pretreatment measure, and is based largely on static, historical factors (e.g., evidence of early conduct problems; prior contact with the justice system). Nevertheless, significant improvements in TE were found for cohort 2 despite the fact that impulsivity/antisociality was somewhat higher in this second cohort.

It is notable that despite the improvements in TE with Indigenous clients, the improved (cohort 2) mean TE rating for Indigenous clients was still marginally lower than the unimproved (cohort 1) mean rating for Non-Indigenous clients (see Figure 1), and the difference between the Indigenous and Non-Indigenous subgroups was also marginally wider in cohort 2. These findings suggest that further work is required to overcome difficulties in TE, specifically with Indigenous ASOs.

A key limitation in the present study is the reliance on clinician ratings of TE in the context of an evaluation of the clinicians' practice, and this may potentially be influenced by expectancy and self-serving biases. Unlike other studies with ASOs, treatment non-completion could not be used as an outcome measure because of the very few non-completions in the treatment program and may not reflect the full extent of TE difficulties in mandated (non-voluntary) clients. In an attempt to address this limitation, a number of strategies were incorporated into the methodology of the study to support of the use of clinician ratings. Clinicians were semi-blind to the purposes of the study and rated a standardised measure of TE. Inter-rater reliability checks also indicated comparable ratings between the clinical manager and the ASO's clinician.

A second limitation is that, while the TE measure used in the present study is focused where practicable on objective behaviours (e.g., the extent to which the client keeps appointments; the extent to which the client completes homework tasks), TE is ultimately a subjective construct, and clinician ratings of ASO TE may reflect the perspective of the clinician and not that of the ASO clients themselves. Although some research on TE with general clinical populations indicates that client ratings may provide a more valid measure of the therapeutic relationship than clinician ratings (e.g. Horvath, 2000), there is no clear basis for assuming this to be true for mandated clients or ASOs. Indeed, studies of clinical adolescent samples show that clinician ratings of the therapeutic relationship were more predictive of therapeutic outcome than adolescent self-report (Shirk & Karver, 2003). Perhaps the strongest support for the use of clinician ratings is the finding of Study Two which showed strong correlations between ratings of the ASO's TE by their clinician and by the ASO themselves.

Third, a number of factors such as the use of highly individualised treatments, and the inclusion of Indigenous clients may limit the generalisability of the findings of Study 4. However, treatment programs with Australian Indigenous ASOs may have some parallels in other jurisdictions with an over-representation of Indigenous clients, such as Canada and New Zealand. Notably, a specific component of the treatment intervention that may be responsible for the observed improvements in TE could not be identified, not least because of the highly individualized treatments employed in the program. Marshall and Marshall's (2007) commentary on the challenges of evaluating flexible, individualized treatment programs may be instructive in this regard.

Finally, whilst Study Four indicated improvements in clinician-rated TE in ASOs, recidivism and other outcome data were not available and thus the influence of improved TE with regards to outcomes for the ASOs (e.g. reduced recidivism; improved life outcomes) could not be examined. The value of improved TE with ASOs

may ultimately be reflected in the outcomes of the therapeutic process. It is therefore recommended that future research studies examine the relationship between TE and ASO recidivism rates and other outcomes.

Previous clinical studies with ASOs have reported high treatment non-completion rates for this client group, and outcome studies with both adolescent and adult sexual offenders have shown that treatment non-completion is associated with increased risks of recidivism. Studies of multisystemic treatment with ASOs have tended to report lower non-completion rates, but little is still known about the factors associated with therapeutic engagement. Notwithstanding its limitations, the present study shows that systematically identifying and targeting empirically-identified factors associated with poorer TE with ASOs can lead to observed improvements in TE with this client group. Furthermore, the results may provide some support for the use of individualised multisystemic approaches to therapeutically engage with ASOs and their families.

CHAPTER 9

General Discussion

The main aim of this thesis was to improve understanding of therapeutic engagement (TE) with adolescent sexual offenders (ASOs). TE was defined as a multifaceted construct which encompasses attendance, client-therapist interaction, communication, perceived usefulness of treatment and psychological involvement in treatment (Hall et al., 2001). In this chapter, the aims and key findings of each of the four studies will be reviewed. Study findings will then be compared with the broader TE literature and limitations of the current research will be summarised. Finally, implications of the current research findings for theory, treatment and prevention will be discussed and suggestions for future research directions will be provided.

Summary of Study Aims and Key Findings

Study 1 aimed to identify multisystemic predictors of TE in a sample of ASOs participating in a specialised treatment program. Initial correlational analyses indicated that peer relationships, Indigenous status and impulsivity/antisociality were associated with clinician-rated TE of ASOs. Further regression analyses found that peer relationships was not predictive of TE after accounting for shared variance with Indigenous status and impulsivity/antisociality. Both Indigenous status and impulsivity/antisociality were predictive of a significant proportion of unique variance in TE. The overall model containing peer relationships, Indigenous status and impulsivity/antisociality accounted for approximately one third of the variance in TE.

Multisystemic treatment models are based on the premise that the involvement of the young person and their family in treatment results in improved treatment

outcomes. Study 2 extended upon this premise by examining whether the engagement of the ASO's family (caregiver) and Youth Justice system (caseworker) in treatment also influenced the adolescent's engagement in treatment. Specifically, Study 2 aimed to examine the congruence of ratings of ASO TE by various informants, and whether caregiver and caseworker TE was associated with ASO TE and progress towards therapeutic outcomes.

Study 2 findings indicated that clinicians and caseworkers rated ASOs TE similarly to the ASO's own ratings of their TE. However, caregiver ratings of ASO TE were not significantly correlated with ASO TE as rated by the ASO or other key stakeholders, possibly due to the small sample size.

One of the principles of multisystemic treatment models is the involvement of key stakeholders within the adolescent's environment in the adolescent's treatment. The findings of Study 2 indicated only weak relationships between caregiver and caseworker TE and ASO TE. However, caregiver TE was strongly correlated with clinician-rated ASO satisfactory goal progress in treatment. Notably, impulsivity/antisociality was again associated with poor ASO TE, as in Study 1.

Study 3 examined aspects of a collaborative multisystem treatment model (CMTM) in relation to ASO TE and outcomes. Specifically, the study examined whether working within a collaborative treatment model was associated with improvements in collaborative treatment partner (CTP) knowledge, skills and confidence in working with ASOs. Study 3 also examined whether CTP knowledge, skills and confidence postcollaboration was related to ASO TE and/or therapeutic outcomes.

The findings of Study 3 indicated that CTPs reported significant improvement in their level of knowledge, skills and confidence in working with ASOs after

working within the CMTM. In addition, CTPs reported significantly greater benefits than obstacles with regards to working within a collaborative treatment model.

CTP knowledge, skills and confidence postcollaboration was significantly associated with the belief that a collaborative model improved outcomes for ASOs. However, the study found only weak relationships between CTP knowledge, skills and confidence postcollaboration and either ASO TE or therapeutic outcomes. Moderate negative relationships were found between impulsivity/antisociality and both TE and satisfactory goal progress of ASOs.

The results of Study 1 were used as a focus for clinical efforts to improve TE particularly with higher-antisocial clients and with Indigenous clients in a specialised ASO treatment program. Study 4 examined whether a modified treatment program with targeted interventions to enhance TE was associated with improved ASO TE. Study 4 compared the ASO cohort from Study 1 with a second, independent cohort of subsequently referred clients who received the modified treatment program.

The findings of Study 4 indicated that a treatment program which focused on improving TE with higher impulsive/antisocial ASO clients and with Indigenous ASO clients was associated with improved TE. Results showed significant improvements in TE with both Indigenous and Non-Indigenous ASOs, although clinical staff remained comparatively less successful at engaging Indigenous ASOs than their Non-Indigenous counterparts.

Comparison with previous research

The context of the current research findings within the broader engagement literature will now be examined through comparison with previous research. The findings of Study 1 in relation to poorer TE in Indigenous ASOs may not be

generalisable to other ethnic groups in clinical and research studies owing to the unique cultural and geographic influences in Australian Indigenous populations. However, Indigenous Australians are more likely to experience socioeconomic disadvantage, low levels of education, and substance abuse, which have all been associated with failure to complete therapeutic treatment in adult clinical samples (Garfield, 1994, Wiersbicki & Pekarik, 1993) and child and family literature (Pelkonen et al. 2000, Snell-Johns et al. 2004). Similar difficulties in TE with Indigenous Australians have been reported by Cull and Wehner (1998) in adult samples of Indigenous sexual offenders in Western Australia. Stathis, et al. (2007) also reported similar difficulties in engaging Indigenous populations with a rural mental health service. Literature on Australian Indigenous populations has highlighted the numerous issues that may complicate TE with Indigenous clients, including mistrust of government, justice and welfare agencies, difficulties in using psychometric testing procedures, illiteracy, issues of shame, the degree of adoption of traditional or Western culture, and lack of therapist knowledge about valid culturally specific practices concerning sex (Jones et al., 2002; Cull & Wehner, 1998).

Additional factors that may have exacerbated difficulties in TE with Indigenous ASOs in the current sample are the remote locality of Indigenous clients, resulting in fewer face-to-face sessions with GYFS treating clinicians. Rural settings have been associated with poorer TE in studies of child and family therapy samples (Snell-Johns et al., 2004). These findings suggest that although transporting clinicians to remote areas can assist with providing equitable service delivery to Indigenous ASOs, numerous cultural factors may pose additional barriers to TE. Mals, et al. (2000) have proposed a number of strategies to overcome cultural barriers to TE with Indigenous offenders. Specifically, engaging Indigenous counsellors and support

workers, seeking feedback from cultural representatives on program format and content, cultural awareness training, seeking endorsement of treatment programs from respected Indigenous representatives and consulting with cultural advisers for the purposes of better informing clinical assessment case formulation and treatment planning.

Notably however, Indigenous Australians comprise less than 3% of the Australian population, yet comprised approximately one third of ASOs in the current sample. This finding is consistent with the over-representation of Indigenous Australians in the legal system, including sexual offences (Harding et al., 1995). It may therefore be more effective to focus on preventing Indigenous Australians from entering into the criminal justice system and associated mandated treatment interventions, rather than attempting to engage them in therapeutic treatment within the criminal justice system framework. Weatherburn, Fitzgerald and Hua (2003) and Wortley et al. (unpublished manuscript) have argued that primary and secondary crime prevention methods are likely to be superior to any form of tertiary level (e.g. treatment) response with regards to addressing the overrepresentation of Indigenous Australians in the criminal justice system.

Study 1 also found that impulsivity/antisociality was predictive of poorer TE in ASOs. These results are consistent with previous research examining factors associated with TE. Conduct and antisocial behaviour problems have been associated with failure to complete therapeutic treatment in adolescent clinical studies (Baruch et al., 1998; Kaminer et al., 1992; Wise et al., 2001), and juvenile offenders (Chamberlain & Rosicky, 1995). Studies of ASOs have also found that impulsivity and conduct disordered/antisocial behaviour were associated with failure to complete treatment (Kraemer et al., 1998; Edwards et al., 2005).

The current findings differed from other research with ASOs which found that sexual maladjustment was associated with failure to complete therapeutic treatment (Eastman, 2005; Hunter & Figueredo, 1999). With regards to multisystemic variables, previous research has found that familial variables (residing with parent, frequent absconding, unemployed father) influenced TE (Edwards et al., 2005; Seabloom et al., 2003), whilst in Study 1, the examined parenting variables were not found to be significantly associated with TE. It is possible that these findings differed as previous studies have focused on demographic characteristics of the family, whereas the current study assessed parenting behaviours. Previous research studies examining TE in ASOs have not examined the influence of peers, which was correlated with TE in the current sample, however peer relationships was not significantly predictive of TE after accounting for the shared variance attributable to Indigenous status and impulsivity/antisociality.

Study 1 found that variables related to the individual (Indigenous status and impulsivity/antisociality) were predictive of TE, whilst the examined systemic variables were not. This finding is notable in the context of studies of both Indigenous populations and adolescents with impulsive/antisocial behaviours which have used multisystemic approaches to enhance treatment interventions with some success. For example, programs which attempted to improved the engagement of Indigenous Australians have shown improved rates of service referrals or engagement when indigenous workers were employed to assist with treatment delivery, or treatment was delivered in the client's local environment (Cull & Wehner, 1998). Similarly, several programs for adolescents with conduct problems use multisystemic treatment approaches and appear to show improved client retention rates when compared with standard treatment approaches (e.g. Curtis et al., 2004). Although Indigenous status

and impulsivity/antisociality were classified as individual level variables in the current study, both are likely to be influenced by systemic factors external to the individual which were not assessed in this study (e.g. local cultural factors such as accepted behavioural norms and values).

Study 2 examined the influence of systemic variables, specifically caregiver and Youth Justice systems, with regards to ASO TE. Study 2 found strong correlations between self-rated ASO TE and ratings of TE by the clinician and caseworker, indicating that stakeholders perceived ASO TE similarly to the ASOs themselves. Previous research in mental health populations with the Engagement Measure (Hall et al., 2001) found moderate correlations between mental health staff ratings and client ratings of the Engagement Measure at baseline, although correlations at six months were non-significant (although means did not differ significantly) (Gillespie et al., 2004). To compare the finding of Study 2 with a commonly used measure of therapeutic relationship, correlations between therapist and client versions of the Working Alliance Inventory (WAI, Horvath, 1981; Horvath & Greenburg, 1986, 1989) show only weak correlations (Horvath & Symonds, 1991). Moreover, the study indicated support for the construct validity of Engagement Measure in a sample of ASOs.

However the findings of Study 2 with regard to TE may not be directly comparable with previous research as other studies have used indicators of TE such as treatment dropout rather than purpose-designed measures. The multisystemic studies of adolescent offenders reviewed generally reported low client attrition rates ranging from 0 to 42% (Curtis et al., 2004, Coatsworth et al., 2001) whilst the GYFS treatment program has very low client attrition. As GYFS clinicians and caseworkers routinely use a range of engagement strategies it may tentatively be suggested that

such strategies may be influential with regards to retention, yet not be directly related to more complex constructs such as ASO TE and goal progress.

The findings of Study 2 did not support a relationship between the TE of key stakeholders (caregiver and caseworker) and ASO TE, although these results must be interpreted with caution due to the small sample size. No previous study has been identified which specifically examines TE of adolescent sexual offenders, therefore comparisons can only be made with studies which have used treatment dropout as an indicator of engagement.

Although no relationship was found between the TE of the caregiver and the ASO, Study 2 found that carer TE was associated with the ASO's satisfactory goal progress in treatment. Borduin et al.'s (1990) study of multisystemic treatment with ASOs found improved outcomes compared with individual therapy, however did not show differential effects with regards to treatment retention. The involvement of caregivers in treatment may be effective in ways not directly related to ASO TE. For example, Henggeler et al. (2009) found that parenting discipline practices mediated the effectiveness of MST with regards to delinquency and deviant sexual interest/risk behaviours. Henggeler et al. suggested that these findings indicated that the effectiveness of MST in treating negative behaviours was mediated through facilitating parents to identify and discourage association with negative peers, and follow through on planned discipline.

A strong negative relationship was found between ASO impulsivity/antisociality and TE in Study 2. A similar relationship was found in Study 1 providing further support for the negative relationship between impulsivity/antisociality and TE, and the influence of individual variables on TE.

Study 3 examined a collaborative multisystemic treatment model (CMTM) that engages CTPs from the ASO's environment to assist with delivery of interventions, thereby improving treatment continuity and support of the ASO. Study 3 found that CTPs reported self-rated increases in knowledge skills and confidence after working within a collaborative treatment model with ASOs. This finding is consistent with previous research that has found that training of "non-traditional" treatment providers can result in improvements in their knowledge and skills in working with clients (e.g. Donoghue et al., 2004). The results of Study 3 differ from previous research however in that previous studies have relied on specific training workshops to increase knowledge and skill levels in treatment delivery partners. In the current study, improvements in CTP knowledge, skills and confidence was achieved through ongoing expert information and guidance provided within the context of a working within a collaborative treatment model. This finding suggests an alternative approach to improving skill levels in individuals working with ASOs.

Previous research studies of "non-traditional" treatment providers also identified numerous barriers to developing their skill levels and carrying out collaborative treatment work (e.g. lack of management support, workloads, and difficulties in recruiting and engaging families) (Donoghue et al., 2004; Mairs & Bradshaw, 2005). However CTPs in Study 3 reported more benefits than barriers to participating in a collaborative treatment model. Moreover, it was found that systemic variables (e.g. limited resources, workload demands) were identified as obstacles rather than factors related to the CTPs skill level (e.g. lack of confidence). This finding may reflect the ongoing support and guidance that is provided to the CTP through the collaborative treatment model, rather than training workshops with no follow up support of treatment providers.

Reported increases in CTP knowledge, skills and confidence were not found to be related to ASO TE or satisfactory progress towards treatment goals in Study 3. However impulsivity/antisociality was again found to be moderately associated with both ASO TE and satisfactory goal progress in a negative direction. These findings may suggest that increases in continuity of service delivery alone may not be sufficient to counteract the motivational barriers to TE associated with antisocial adolescents as identified by Hemphill and Howell (2000). These findings may also suggest that additional interventions are required within the various systems involved with the adolescent to specifically target the factors supportive of the ASOs impulsive/antisocial behaviours.

It was theorised that if variables associated with poorer TE in ASOs could be identified, then interventions could be tailored to meet the specific needs of resistant clients, thereby resulting in improved therapeutic engagement. Study 1 identified impulsivity/antisociality and Indigenous status as significant unique predictors of poorer TE in ASOs, and the ASO treatment model was subsequently modified in an effort to improve TE, particularly with higher antisocial ASOs and Indigenous ASOs and their families. Efforts to improve TE included improving the knowledge, skills and confidence of CTPs, having professionals be responsible for TE rather than the ASO and their family, and increasing the cultural awareness and competence of clinicians. After controlling for impulsivity/antisociality, Study 4 findings indicated support for the modified treatment model in improving TE with both Indigenous and Non-Indigenous ASOs, although Indigenous ASOs remained comparatively less engaged than Non-Indigenous clients. The findings of Study 4 in relation to Indigenous clients indicate that additional strategies are required to overcome the unique factors that may function as barriers to TE with Indigenous ASOs.

Studies 1, 2 and 3 found that antisociality/impulsivity was associated with poorer TE which was consistent with previous research with regards to adolescent offenders and ASOs. The modified treatment model with clinician efforts to improve TE resulted in higher client TE at Time 2, despite the cohort having somewhat higher impulsivity/antisociality. Given that previous treatment research indicates that antisociality is associated with poorer engagement in treatment interventions, and that failure to complete treatment is associated with higher recidivism in ASOs, the current findings indicate promising results with regards to improving TE with antisocial ASOs.

Although Indigenous ASOs remained comparatively less engaged than Non-Indigenous clients in Study 4, Indigenous ASOs that received the modified treatment model had significantly higher ratings of TE than the Study 1 cohort. Modifications that were made to the model with regards to Indigenous clients were consistent with Mals et al.'s (2000) suggestions for modifying conventional offender programs to increase their responsiveness for Australian Indigenous offenders. Specifically, suggestions include: 1) engaging indigenous counsellors and support workers; 2) soliciting feedback from cultural representatives on program content and format; 3) seeking endorsement of treatment programs from respected indigenous community leaders; and 4) consulting with cultural advisers for the purposes of better informing clinical assessment, case formulation and treatment planning. The finding that the modified treatment program which included increasing the cultural competence of clinical staff, engagement of cultural consultants, utilising cultural supervision, building relationships with indigenous communities, and engagement of indigenous CTPs was consistent with previous research which showed that programs that were culturally sensitive to indigenous needs regarding service delivery results in

improvements in engagement of indigenous clients (e.g. Cull & Wehner, 1998; Stathis et al., 2007).

Limitations

The findings of the current research must be considered in the context of the limitations of the studies. Selected measures were rated retrospectively which may be subject to bias by clinician recall. Clinician rather than ASO ratings of TE were used in Studies 1, 3 and 4, and ratings of goal progress and TE may have been subject to method bias as they were both completed by the treating clinician. Measures could not be compared with other traditional indicators of engagement such as attendance as the client groups was a mandated treatment population. However, the relationship between client and clinician ratings of TE was examined in Study 2 which supported the use of clinician ratings as a valid approximation of the ASOs' ratings of their own TE. In addition, ASOs who agreed to participate in the research may also have been more therapeutically engaged than non-consenting clients, however, this bias is common to research examining TE. Findings related to the TE of Indigenous ASOs may have limited generalisability to other populations, however, difficulties in therapeutically engaging Indigenous clients has been reported in a range of Australian treatment programs. Furthermore, findings may be generalisable to other countries with an overrepresentation of Indigenous clients (e.g. Canada, New Zealand). Finally, ASOs in treatment are a relatively low prevalence population and hence a number of the studies were limited by relatively small sample sizes. Thus, some studies may have failed to detect significant results where true results existed due to small sample size. However, Study 1 sample size is comparable and/or larger than previous TE studies with ASOs (e.g. Kraemer et al., 1998; Edwards et al., 2005).

These limitations should be considered in the context of the strengths of the current research, and the contribution these study findings may provide to the broader literature. Outcome studies have found treatment non-completion to be associated with increased risk of recidivism in both adolescent and adult sexual offender samples (Hunter & Figueredo, 1999; Hanson & Bussiere, 1998). Despite these findings, few studies have specifically examined TE in ASOs. Previous research with ASOs has also focused on treatment non-completion rather than TE itself, and has tended to report very high non-completion rates for this client group. The present study is the first to examine TE with ASOs in the context of a clinical program with very low treatment non-completion rates. In addition, a number of the previous studies of TE with ASOs were biased due to the criterion used to accept ASOs into treatment. For example, Hunter and Figueredo (1999) found that denial was one of the strongest predictors of treatment non-completion however, ASOs who categorically denied their offending were excluded from the program prior to study commencement. In contrast, acceptance into the GYFS program is not dependent upon client amenability to treatment, and acceptance is biased towards higher risk clients.

Multisystemic treatment studies typically report lower rates of treatment non-completion, yet few studies have specifically examined factors that may be associated with improved TE. The current study improves on previous research in this area through the use of an empirically validated measure of TE. The current thesis identified key variables associated with poorer TE in ASOs, specifically impulsivity/antisociality and Indigenous status, and identified caregiver TE as being associated with ASO satisfactory goal progress in treatment. The research also indicated support for a multisystemic collaborative treatment model which may be effective in improving TE with resistant clients.

Implications of the Studies

The findings of the current research have implications in relation to theory, treatment provision, and prevention of sexual offending. The implications of the research in each of these areas will now be examined.

Implications for Theory

Multisystemic treatment models are based on the premise that involving both the young person and their family in treatment, and addressing the influence of peer and community systems, results in improved outcomes (Henggeler & Sheidow, 2003). The findings of the current thesis provide support for the influence of individual factors on TE with ASOs, namely impulsivity/antisociality and Indigenous status, whilst family and systems variables were not found to be directly related to engagement. Although individual characteristics may be influential with regards to poor therapeutic engagement, the systems surrounding the young person (e.g. family, peer, legal systems) can operate indirectly by promoting or discouraging attitudes associated with TE in programs. For example, it was suggested that there may be an interaction effect between ASOs who have higher levels of impulsivity/antisociality and their treating clinician and various supports (caregivers, caseworkers, etc) in that clinicians may have less empathy for ASOs with antisocial behaviours, or caregivers may be fatigued and less able to provide a proactive level of practical support, or alternatively caregivers may also have antisocial behaviours which reinforce the ASO's own antisocial behaviours.

The findings of the current research indicated that caregiver TE was associated with satisfactory goal completion in ASO treatment. Treatment programs of

adolescent offenders which target the multiple systems surrounding the young person tend to report lower treatment non-completion rates (e.g. MST, Curtis et al., 2004). Moreover, the current thesis found that a modified treatment program which used a multisystemic approach to enhance TE resulted in higher TE rates with Indigenous clients.

In addition, the findings of the current research may contribute to theories of ASO TE. Antisociality/impulsivity was consistently identified as having a negative relationship with TE with ASOs. This finding was comparable with previous TE research in a range of client samples. Previous research in samples of adolescent offenders indicates that adolescents who engage in antisocial behaviours are less motivated to change than are older individuals and that lower motivation in turn is associated with poorer treatment attendance and less favourable outcomes (Hird, Williams, & Markham, 1997; Melnick, De-Leon, Hawke, Jainchill & Kressel, 1997). Hemphill and Howell (2000) identified a number of factors that may potentially interfere with TE with adolescent offenders. Specifically, adolescent offenders may be unwilling to change antisocial behaviours associated with their self-identity (Moffit, 1993), they may externalise difficulties (e.g. acting out, substance abuse) and lack self-reflection skills (Eliany, 1992); they may be mistrustful of authority figures and resistant to their intervention particularly in mandated treatment (Farabee, Nelson, & Spence, 1993); and may lack feelings of acute emotional distress or guilt (Bernstein, 1996; Forth, Hart & Hare, 1990). Prochaska, DiClemente and Norcross (1992) suggest that clients with low motivation may not be suitable for action-orientated treatment and may experience greater benefit from motivational interventions to increase their readiness to change. Consequently, these findings have implications for

understanding TE in relation to effective ASO treatment provision, and may be generalisable to other offender client groups.

Implications for Treatment

There are a number of implications for treatment arising from the findings of the current research. Specifically, therapeutic interventions should be individualised to take into account the specific factors that may influence TE with ASOs. For example, antisocial ASOs may require greater use of motivational enhancement strategies, and Indigenous clients may require strategies to ensure that their treatment is culturally appropriate. In addition, the current study suggests that multisystemic approaches to target specific factors associated with poorer TE may be effective in improving TE in ASOs, although additional knowledge and strategies are required with regards to enhancing TE of Indigenous ASOs. Perhaps most importantly however, the current research suggests that changes in clinician strategies and treatment programs can effect changes in degree of TE.

The current research also has implications for training and skill development, and service provision. Specifically, the current study found that CTPs reported improved knowledge, skills and confidence after working within a collaborative treatment model with an expert clinician. This finding suggests that the skill levels of “non-traditional” treatment providers may be improved through alternative training models rather than formal training workshops.

Implications for Prevention

The current thesis findings suggest a number of implications with regards to prevention of sexual offending. Foremost, although studies of ASOs report the

effectiveness of treatment programs with regards to recidivism (e.g. Walker, et al. 2004), studies of both adult and adolescent samples of sexual offenders have found that individuals who begin but who fail to complete treatment have a higher recidivism risk than individuals who did not enter treatment at all. It is suggested that by improving TE and thereby retaining ASOs in treatment, some recidivism may be prevented.

Future Research Directions

Few research studies have examined TE in ASOs and existing studies have used indicators of engagement (e.g. treatment non-completion) rather than measures specifically designed to assess TE. Thus, a number of future research directions are suggested. The current research identified individual factors as being predictive of TE, yet multisystemic approaches appear to have improved treatment retention and TE of ASOs. Therefore it is suggested that future research studies examine the role of putative multisystemic mediating and moderating variables with regards to ASO TE and outcomes. Multiple studies have identified a negative relationship between antisociality and TE, and that antisocial clients are poorly motivated with regards to treatment. It is therefore suggested that future research examine whether use of motivational enhancement strategies in the early stages of treatment results in improved TE with antisocial ASOs. Studies examining whether ASOs who have higher TE during treatment have lower recidivism rates would also be of value in understanding treatment effectiveness. Finally, the current thesis findings are consistent with previous literature (e.g. Mal et al., 2000) which suggests that additional knowledge is required with regards to the TE of indigenous clients.

Specifically, it is suggested that further research with regards to identifying and overcoming barriers to treatment in Indigenous ASO populations is necessary.

Final Conclusions

Despite the increased risks associated with ASOs failing to complete treatment, little research to date has focused on studying TE in this population. The current thesis aimed to study TE in ASOs undergoing specialised treatment, and is the first known study to use a measure of TE rather than indicators of engagement which may not accurately represent TE in mandated treatment programs. These studies therefore have contributed to a greater understanding of TE in adolescents in mandated treatment programs. In addition, the current research has examined TE within a multisystemic framework which contributes to a broader understanding of factors that may influence TE in ASOs including the involvement of key stakeholders, whether they perceive ASO TE similarly to the ASOs themselves. Most importantly, the current research has identified unique predictors of TE, and promising directions for improving TE through targeted multisystemic interventions. The current thesis may contribute to an enhanced understanding of TE, and provide direction for treatment provision of therapeutic services with ASOs.

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